

Contra Costa County  
General Plan  
1995-2010



---

July 1996







Community  
Development  
Department

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Contra  
Costa  
County



Harvey E. Bragdon  
Director of Community Development

December 9, 1996

**TO: INTERESTED INDIVIDUALS AND AGENCIES**

**SUBJECT: RECONSOLIDATED CONTRA COSTA COUNTY GENERAL PLAN**

In July of 1996, the Board of Supervisors adopted a reconsolidated Contra Costa County General Plan. This reconsolidation effort integrated the general plan amendments which had been adopted by the County over the last six years into the Contra Costa County General Plan 1990-2005, updated some factual information, and amended the General Plan land use map to reflect land acquisitions by public agencies. The result was the Contra Costa County General Plan 1995-2010.

A copy of this revised document is being provided to you and your agency. It is being produced in a ring binder format so that future amendments can be integrated into the plan by substituting obsolete pages with replacement pages.

Since the plan was adopted, two amendments have been adopted to the plan. Neither modified the plan text, but they did modify the over-sized maps which are included with the report. A copy of those maps is attached.

In the spring of 1997, staff will be setting up a process for notifying the public of completed amendments and for receiving replacement pages and maps. If you have an interest in being notified of this procedure please send a note to this effect to Audrey Woods of our staff, at the following address:

Contra Costa County Community Development Dept.  
Attn: Audrey Woods  
651 Pine Street, 4th Floor - North Wing  
Martinez, CA 94553

Please include your mailing address, and phone number.

Given the cost to reproduce this document, only one free copy is being provided per agency. If additional copies are desired they may be purchased for \$50.00 from our office and for \$58.25 if you request it be mailed. Contact Audrey Woods at (510) 335-1235 for more information.

I hope you will find this document useful.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Harvey E. Bragdon".  
Harvey E. Bragdon  
Director of Community Development







[illegible]

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Land

2 MOLE TOWN M. DUND  
1 STY. BE. F. HALL

2nd T. JAMES HALL  
2nd Y. BELL F. HALL

2nd B. FAMILY LON  
2nd Y. BE. F. HALL

2nd B. FAMILY LON  
2nd Y. BE. F. HALL

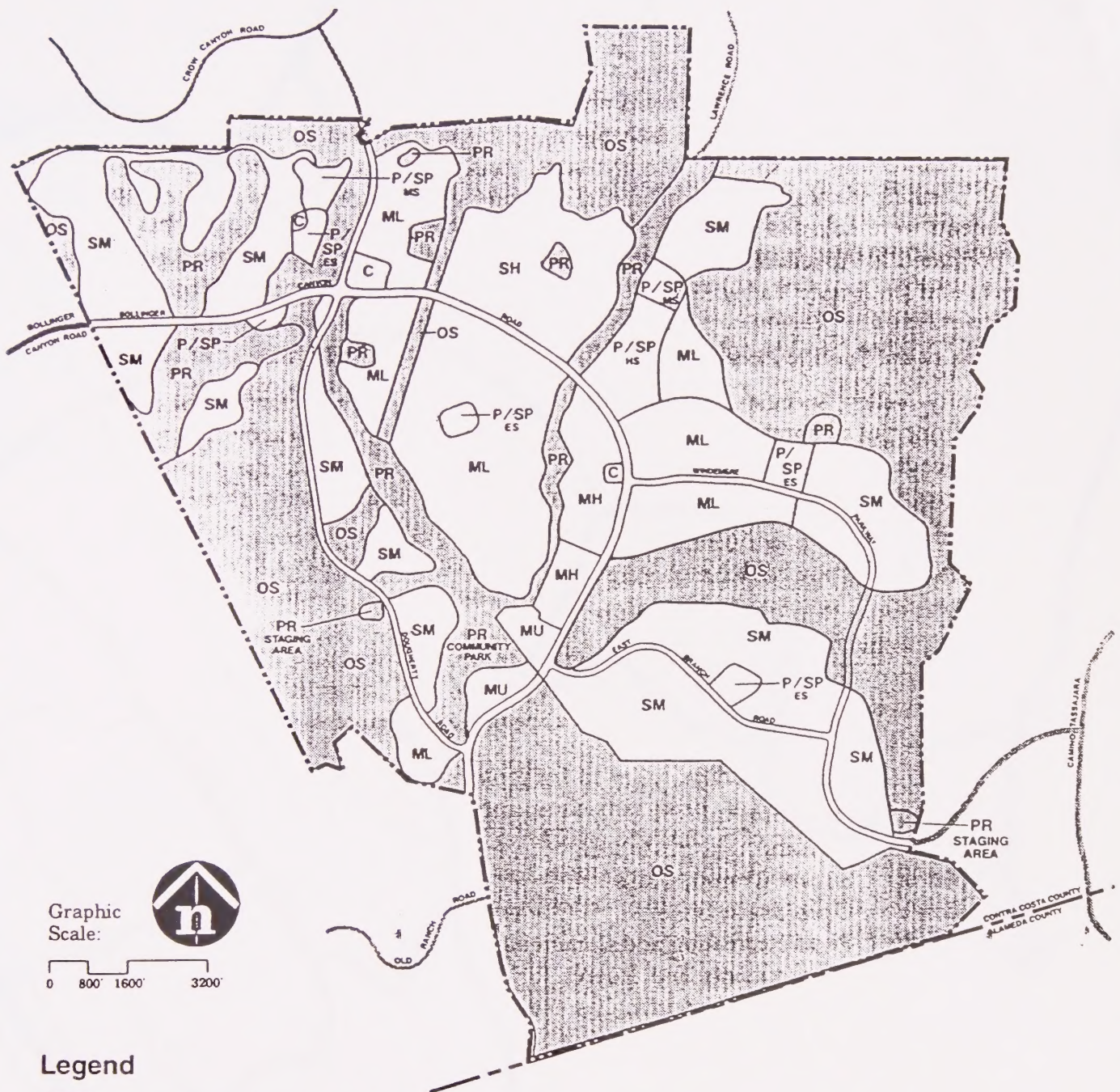
PARKS AND BE. (2nd)

OPEN SPACE

2nd Y. BE. F. HALL



### General Plan Amendment - Staff Recommended



Graphic  
Scale:

0 800' 1600' 3200'



#### Legend

- SM SINGLE FAMILY MEDIUM DENSITY RESIDENTIAL
- SH SINGLE FAMILY HIGH DENSITY RESIDENTIAL
- ML MULTIPLE FAMILY LOW DENSITY RESIDENTIAL
- MH MULTIPLE FAMILY HIGH DENSITY RESIDENTIAL

- C COMMERCIAL
- MU MIXED USE VILLAGE CENTER INCLUDES MULTIPLE FAMILY HIGH DENSITY RESIDENTIAL AND COMMUNITY COLLEGE, COMMERCIAL, CIVIC
- P/SP PUBLIC/SEMI-PUBLIC ELEMENTARY, MIDDLE, HIGH SCHOOLS, OTHER

- PR PARKS AND RECREATION
- OS OPEN SPACE
- PR PRIMARY ROADS





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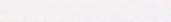
# Dougherty Valley

MAP B



## Proposed Circulation Element-Staff Recommendation

### LEGEND

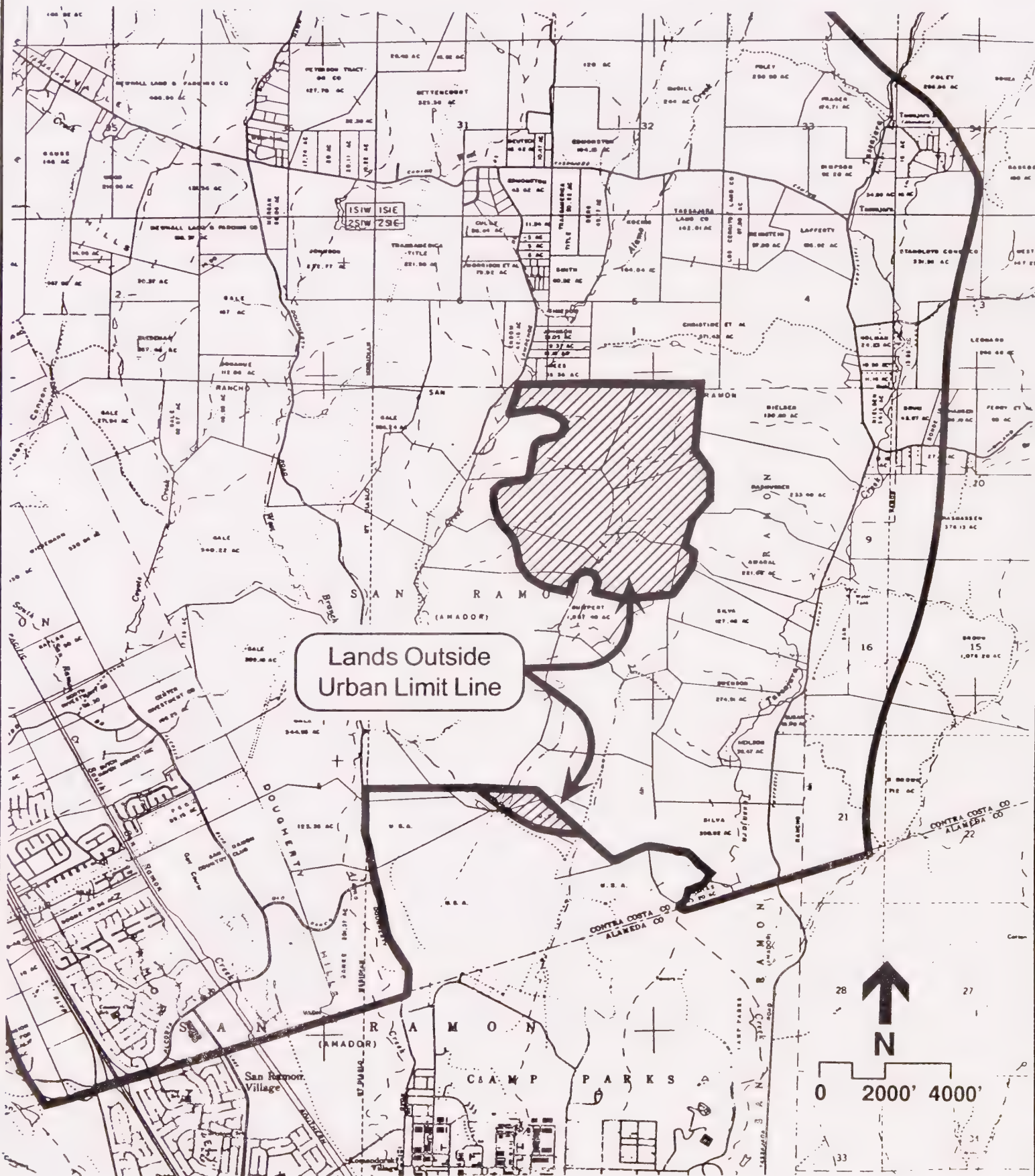
-  Existing Freeway
-  Existing Arterial
-  Proposed Arterial
-  Existing Collector
-  Proposed Collector







### Staff Recommended Urban Limit Line Changes









CONTRA COSTA COUNTY

GENERAL PLAN

1995 - 2010

July 1996

Contra Costa County  
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## 1. INTRODUCTION

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## **1. INTRODUCTION**

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### **1.1 PURPOSE**

The purpose of the Contra Costa County General Plan is to express the broad goals and policies, and specific implementation measures, which will guide decisions on future growth, development, and the conservation of resources through the year 2010. The goals, policies and implementation programs contained in the General Plan represent the hopes and concerns of the residents of the County in terms of defining and preserving a "quality of life." The various elements or chapters of the plan are intended to provide objectives, principles and standards to decision-making bodies in the County, as well as numerous other public agencies, that will be making decisions about the development of private and public lands and the locations and extent of infrastructure improvements such as sewers and roadways.

Although a General Plan is primarily concerned with the physical development of property, the consequences of a plan's growth policies also impact the social fabric of a community. For example, if a General Plan allows the development of an industrial or business park in a specific location, more jobs may eventually become available to local residents. Similarly, if a plan designates a park or other public facility, or if a program encourages the construction of affordable housing, the policy will have a social and economic impact upon the quality of life in those affected locations.

### **1.2 PUBLIC PARTICIPATION IN GENERAL PLAN PROCESS**

Preparation of the General Plan 1990-2005 involved a unique and extensive process of public participation and outreach. In early 1986, the County Board of Supervisors established a General Plan Congress to advise the County staff on how to revise the County's General Plan. The 67-member General Plan Congress represented a broad range of interests in the County, including the City Councils from each of the 18 cities in the County, County service districts, environmental groups, landowners, developers, and public interest groups including the League of Women Voters, Citizens for a Better Contra Costa, Sierra Club, Audubon Society, and the Greenbelt Alliance.



The General Plan Congress met monthly from July 1986 through January 1989. In addition, each Congress member sat on one of three subcommittees: Agriculture and Open Space, Infrastructure and Jobs/Housing Balance. These subcommittees met on a weekly or biweekly basis to take public comment, debate important issues and develop reports and position papers for the entire Congress. The subcommittees kept lists of the public attendance at the meetings, and advised those attendees of the meeting times by mail.

With the help of the General Plan Congress, the County prepared a draft General Plan in November 1988. After recommending additional changes to that draft, the Congress voted to pass the draft General Plan onto the Community Development Department staff and Planning Commission without recommendation, and to disband.

In March 1989, the County made available for public review and hearing a draft of the General Plan. Between March 1989 and August 1990, the County Board of Supervisors held numerous public hearings and received extensive written comments on the March 1989 draft. All segments of the Contra Costa County population participated in that public comment period, including representatives of ranchers, developers, farmers, environmentalists, labor groups, cities, special districts, business and industrial associations.

In response to the public comments received, the County then prepared a revised and updated draft of the General Plan, which was made available for additional public comment and review in October 1990. Between October and December 1990, the County Planning Commission and Board of Supervisors held additional public hearings on the October 1990 draft. As a result of those comments and the passage on November 6, 1990 of Measure C, the 65/35 Contra Costa County Land Preservation Plan (described below), the County again revised the document, resulting in the Contra Costa County General Plan 1990-2005.

### **1.3 PUBLIC PARTICIPATION THROUGH VOTING PROCESS**

In addition to the extensive public participation and input process through which this General Plan evolved, the voters of the County also influenced various aspects of this General Plan through the referendum process. Two initiative measures in particular have and will continue to impact the physical development of the County during the horizon of this General Plan. These two measures, "the Revised Contra Costa Transportation Improvement and Growth Management Program" adopted on August 3, 1988 ("Measure C 1988"), and "The 65/35 Contra Costa County Land Preservation Plan" adopted on November 6, 1990 ("Measure C - 1990"), expressed voters' concerns, goals, and principles relating to a vision of long-term growth in Contra Costa County.

The policies and principles expressed by the voters in Measure C - 1988 and Measure C - 1990 have guided the evolution of most of the elements of this General Plan. Generally speaking, these two measures guided the preparation and completion of this General Plan in such areas as growth management, land use, transportation and circulation, housing, public facilities and services, and conservation and open space issues. To underscore the importance these measures have had on the General Plan process culminating in the adoption of this General Plan and in the interest of making this constitution of land use document more meaningful for the public, the text of Measure C - 1988 and Measure C - 1990 is set forth in its entirety in Section 1.10 of this Introduction section. Where appropriate or required, provisions of these two measures have been integrated throughout the various elements of this General Plan.

The approval by the voters of Measure C - 1988 in 1988 was a major factor in the creation and establishment of the scope of the Growth Management Element found in this General Plan. Measure C - 1988 requires that the County and other jurisdictions must adopt a Growth Management Element in accordance with various terms of the measure in order to receive local street maintenance and improvement funds. The influence of Measure C - 1988 is reflected throughout this General Plan since the Growth Management Element has necessarily been correlated with the other elements in this General Plan.

In addition to responsibly listening and responding to the concerns and hopes of the public expressed through the General Plan Congress, including thousands of hours of public meetings and hearings, the Board of Supervisors placed Measure C - 1990 on the ballot prior to the completion of this comprehensive General Plan process. Through this initiative measure, the voters affirmed key policies concerning open space and agricultural preservation, creation of an Urban Limit Line, protection of open hillsides and significant ridge lines, growth management, affordable housing and other issues which the County had been preparing to adopt as part of its General Plan. The success of this measure evidenced the broad support for these policies. In addition, as part of this successful Board of Supervisors' initiated measure, the voters approved a 65/35 land preservation standard which limits urban development in the County to no more than 35 percent of the land in the County and requires that at least 65 percent of all land in the County be preserved for agriculture, open space, wetlands, parks and other non-urban uses. Following this mandate of the voters, the Board proceeded to reflect the Measure C - 1990 policy in this General Plan.

#### **1.4 1995 PLAN RECONSOLIDATION**

This Contra Costa County General Plan 1995-2010 is an updated version of the plan prepared by the General Plan Congress. It has been modified to reflect all plan amendments adopted since January 1995. It also corrects some errors or inconsistencies found in the 1990-2005 version of the plan and updates certain facts.



## 1.5 LEGAL AUTHORITY

State law, specifically Sections 65300 through 65403 of the California Government Code, mandates that all cities and counties prepare and adopt a comprehensive, long-term, and internally consistent General Plan to guide the future physical development of their jurisdictions. According to recent court decisions clarifying the intent of the State legislation, the role of each community's General Plan is to act as a "charter" for development; it is the foundation upon which all land use decisions are to be based.

At one time, local General Plans were looked upon as a set of broad policies that had small roles in development decisions. However, changes in State law since the original statutes were adopted in the 1950's have vastly boosted the importance of the General Plan in local decision-making. A General Plan must now provide more concrete direction for land use and facility approvals, while providing flexibility for balancing necessarily competing goals and policies.

State law requires that once a local government has adopted its General Plan, local officials must implement it. The Government Code provides general direction to the planning agency for implementing the overall plan, but requires that more specific implementation programs be adopted for some of the individual portions of the plan, such as the Housing and Open Space Elements. The most commonly recognized form of implementation is the zoning ordinance, which specifies exact development standards (types of uses allowed, building heights and setbacks, etc.) for the various zones or districts within a jurisdiction.

Accordingly, State law requires that the zoning and subdivision ordinances for almost all jurisdictions in California must be consistent with the adopted General Plan (Section 65860). In addition, the following city or county land use approvals must be consistent with its General Plan: all subdivisions, rezonings, specific plans, capital improvement programs, redevelopment plans, development agreements, park dedication ordinances, agricultural preserve contracts, housing authority projects, local coastal plans, and several other specific approvals. Although not specifically required by State statute, a 1984 Appellate Court decision also held that the approval of all use permit applications must be consistent with the local General Plan. Thus, recent State legislation and court decisions effectively make most implementing ordinances used by local jurisdictions in day-to-day land use decision-making subservient, or secondary, to General Plan policies and maps.

## 1.6 COMPONENTS OF THE GENERAL PLAN

California statutes require that all cities and counties prepare and adopt a General Plan that contains the following seven mandatory "Elements" or subject categories:

Land Use Element. This Element describes the general distribution and intensity of uses of land for housing, business, industry, open space, public facilities, etc., with accompanying maps.

Circulation Element. This Element identifies the location and extent of existing and proposed streets, arterials, highways, transportation routes and terminals, and other related facilities.

Housing Element. This Element contains a comprehensive assessment of current and projected housing needs for all segments of the community, a list of policies to meet the needs, and an inventory of specific action programs to implement the policies.

Conservation Element. This Element addresses the conservation, development, and use of natural resources such as water, forests, soils, rivers, and mineral deposits.

Open Space Element. This Element details plans and measures for preserving open space areas in order to manage the production of resources, to provide outdoor recreation, to preserve the public health and safety, and to identify important agricultural lands.

Safety Element. This Element establishes policies and programs to protect the community from risks associated with seismic, geologic, flooding, wildfire, and other hazards.

Noise Element. This Element identifies noise problems in the jurisdiction; defines standards and mitigation measures; and provides coordination with land use policies.

The degree of detail to which each issue is discussed in the plan depends upon local conditions and its relative perceived importance. In addition to the seven element categories listed above, State law encourages local jurisdictions to prepare and adopt any other elements or address any other issues germane to the jurisdiction's physical development.

The Contra Costa County General Plan includes the seven mandated elements. The plan also includes two optional elements, namely, a Public Facilities and Services Element and a Growth Management Element. For ease of discussion, the Public Facilities Element contains some of the mandatory components of the other statutory elements. The plan is organized as follows:

Chapter 1: Introduction

Chapter 2: Planning Framework

- Chapter 3: Land Use Element  
(Includes all Countywide land use goals, policies, and implementation measures, as well as more detailed land use policies applied to specific unincorporated areas. As referenced in the Land Use Element, many of the remaining required components of this Element are contained in the Public Facilities/Services Element.)
- Chapter 4: Growth Management Element  
(Includes a Growth Management Program and policies from Measure C-1988.)
- Chapter 5: Transportation and Circulation Element  
(Includes goals and policies regarding major thoroughfares, railroad and transit routes, terminals, and other local public transportation systems.)
- Chapter 6: Housing Element  
(Includes goals and policies regarding programs, improvements, development and preservation of housing needs to meet all economic sectors of the community.)
- Chapter 7: Public Facilities/Services Element  
(Includes policies regarding water and sewer service; flood control; landfills; public buildings; police and fire protection; solid and hazardous waste management; schools; childcare; and other public facilities.)
- Chapter 8: Open Space Element  
(Includes overall goals and policies for the County, as well as policies regarding scenic resources; historic/cultural resources; the 65/35 preservation standard and parks and recreation.)
- Chapter 9: Conservation Element  
(Includes overall goals and policies for the County, as well as policies regarding vegetation and wildlife; agricultural resources; renewable energy resources; mineral, soil, and oil and gas resources; water resources; harbors; and air resources.)
- Chapter 10: Safety Element  
(Includes goals and policies regarding the protection of the community from seismic and geological hazards and other natural disasters.)
- Chapter 11: Noise Element  
(Includes goals and policies regarding noise levels and sources that are used in setting land use policies and for developing and enforcing a local noise ordinance.)

## INTERNAL CONSISTENCY

State planning law requires that all parts of the General Plan comprise an integrated, internally consistent and compatible statement of policies. These standards imply that: 1) all elements of the General Plan have equal legal status; 2) all goals, objectives, policies, principles, standards and plan proposals in the General Plan must be internally consistent; and 3) any implementation programs set out in the plan must follow logically from



the plan's goals and policies. Hence, each chapter of the General Plan clearly states its legal authority, relationship to other elements, relationship to other General Plan documents, and its organization.

## 1.7 DEFINITION OF MAPS, GOALS, POLICIES, AND IMPLEMENTATION MEASURES

The California Government Code states that "the General Plan shall consist of a statement of development policies and shall include a diagram or diagrams and text setting forth objectives, principles, standards, and plan proposals" (Section 65302). The purpose of this section is to define these terms in the context of this General Plan.

### GENERAL PLAN DIAGRAMS (MAPS)

The diagrams that are required in a General Plan under the State law have been defined as graphic expressions of the plan's development policies. However, there is a debate among planners and lawyers alike about how detailed or general the maps (and text) should be in a General Plan. The diagrams or maps in a General Plan need not be as detailed as other regulatory maps, such as zoning maps, but they should be detailed enough so that the users of the plan, after reviewing all other pertinent maps and portions of this plan, can reach the same general conclusion regarding the appropriate use of any parcel of land at a particular phase of a city's or county's physical development.

In many instances, a specific parcel may be located in more than one General Plan land use designation, since these designations tend to follow natural features of the land, which are not always contiguous with property lines. For a large vacant parcel, the hilly, unbuildable portion of the site may be designated for open space uses, while the flat areas may be designated for housing or commercial uses. Similarly, portions of parcels may be located in or outside the Urban Limit Line.

Decision makers should be able to use the General Plan, including its diagrams or maps, in coordinating day-to-day land use and infrastructure decisions. At the same time, given the long-range nature of a General Plan, its text and maps should be general enough to allow a degree of flexibility in decision making as conditions change. For example, a General Plan may recognize the need and desirability of a community park in a proposed residential area, but the precise location of the park may not be known when the plan is adopted. The plan does not need to pinpoint the location, but it should include a generalized designation on the diagram showing the general location, along with policies indicating that the park site will be selected and reserved when the area is developed.<sup>1</sup>

## GOALS

A goal statement sets the direction for more specific policies and implementation programs. A goal is an ideal future end, condition, or state which is related to the public health, safety, or general welfare toward which planning measures are directed. A goal is a general expression of community values and, therefore, is abstract. Consequently, a goal is generally not quantifiable, time dependent or suggestive of specific actions for its achievement.<sup>2</sup>

## POLICIES

A policy is a specific statement intended to guide decision making. Policies are based upon General Plan goals and are arrived at through planning experience, studies, and an interpretation of the best available data and information at a particular point in time. Decisions as to whether a particular action, program or project is consistent with this General Plan will consider whether all aspects of a future action will further the objectives and policies of this General Plan without obstructing the attainment of these policies. Policies in this General Plan appropriately strike a balance between clarity for guiding decision makers and a framework for comprehensively weighing necessarily competing policies in a county as diverse as Contra Costa County. The policies expressed in this General Plan are intended to be part of an integrated document encompassing concerns which are both compatible and competing, and it is inappropriate to assess consistency of a singular policy without reference to this framework. As a constitution-type document, the policies in this General Plan are intended to guide decision makers through this difficult balancing process. At the General Plan level, policies are not static as ironclad regulations. The policies expressed in this General Plan were based on the best available information at the time the Plan was prepared. New and better information will necessarily be presented to the decision makers during the life of this Plan, therefore requiring that, as an evolutionary document, the policies expressed in this General Plan will be evaluated in light of this new and better information and, where necessary, policies will be updated.

While cautioning the reader of this General Plan document against myopically focusing on a particular policy without reference to its harmonized context, it is important that certain of these guiding policies be expressed with stronger levels of commitment than others. When considering policies in this General Plan, the use of the word "shall" indicates more directive than the use of the word "should." While there are occasions where a proper balancing of the hundreds of policies contained in this document, when viewed as an integrated whole, would not warrant strict adherence to a particular policy, the level of compelling or countervailing policies would appropriately be less to offset competing policies using the word "should," than to offset a policy or policies using the word "shall."

## IMPLEMENTATION MEASURES

An implementation measure is a specific action, procedure, program, or technique that carries out a General Plan policy. The most obvious example of an implementation measure is a jurisdiction's zoning ordinance. Often, implementation measures cited in a General Plan will consist of a list of specific programs that should be carried out after the plan is adopted. When a plan is updated, a careful review of the list of previously adopted implementation measures can indicate how realistic and effective the plan has been during the previous years.

### 1.8 THE DIFFERENCE BETWEEN ZONING AND GENERAL PLAN DESIGNATIONS

One of the most common misunderstandings about General Plans in California is their relationship to adopted zoning ordinances. As the previous discussion has already indicated, zoning is the implementation of a General Plan and it must be consistent with General Plan policies and land use designations for specific properties. In simple language, this means that zoning is secondary or subservient to the General Plan; in the event of a conflict, the General Plan is followed.

Unfortunately, due to staffing limitations and community opposition, a zoning ordinance will often not be revised to be made consistent with the new General Plan (or General Plan Amendment (GPA)), which causes confusion to members of the public for years to come.

Thus, it is vitally important that a program to begin the systematic review and revision of zoning and other ordinances be undertaken by staff immediately after the adoption of a General Plan. This action will ensure that the ordinances governing day-to-day land use decisions do not conflict with newly adopted plan policies.

### 1.9 HOW TO USE THE GENERAL PLAN

The General Plan includes maps in each Element, as well as accompanying text that lays out goals, policies, and implementation measures grouped around specific issues. Thus, if a property owner or other member of the public wants to know what General Plan policies might apply to a specific property, he or she can begin by examining the Land Use Element map to determine what land use designation is applied to the property (e.g., "Single Family Residential-Low Density," "Commercial," etc.).

The owner should use the land use map in conjunction with the other maps within the plan (e.g., the flooding and seismic hazard maps), as well as note the interplay with other element's specific written goals, policies,



and implementation measures (e.g., growth management), to determine whether a development proposal for a particular site is fully consistent with the County General Plan.

As an example only, the property owner would follow the steps outlined below to find the maps and policy language in the Land Use and other General Plan Elements which could affect development or redevelopment of the property:

- 1) Examine the Land Use Element map to determine the land use designation for the property and the location of the Urban Limit Line.
- 2) Check the maps and text in the other General Plan Elements, especially the Open Space, Conservation and Safety Elements, to see if the property is located within or adjacent to some type of resource or hazard area (e.g., a "significant ecological resources area," a flood hazard area, an area of high liquefaction potential, etc.) or has slopes over 26 percent grade subject to hillside protection policies.
- 3) Read the general goals and policies in the Land Use Element, the provisions of the County's Growth Management Program (Chapter 4), and other relevant Elements as cross-referenced in each Chapter's subheading "Relationship to other General Plan Elements," to determine how they might affect development or redevelopment of the area in which the property is located.
- 4) Check Chapter 3 to determine if any detailed policies or development standards apply to the area in which the property is located (e.g., if the property is located in Crockett, read the section entitled "Policies for the Crockett Area").
- 5) If the property is located in a rural area, check whether public facilities such as water or sewer serve the area and read the relevant parts of the Public Facilities/Services Element.
- 6) Check the general goals and policies in the Land Use Elements and the Open Space Element to understand the potential limitations presented by the 65/35 Land Preservation Standard.

Note that the above sequence of examination is an example of what may be the bare minimum that should be followed and is probably not sufficient in many instances. Depending on the specific location or characteristic of the area or property, several other steps should be added so that other portions of the General Plan are consulted. For example, if the property is located adjacent to a known noise generator, such as a highway or heavy industrial area, the Noise Element should be examined to determine whether the property is included within a mapped noise "contour" line of a certain level. If it is located within a specific noise contour, General Plan policies in that element direct that noise impacts affecting new development on the property must be properly mitigated. A thorough reading of the General Plan text and maps is advisable.

Similarly, if a proposed project is located on a property that is crossed by a riparian vegetation or a creek, the specific policies that apply to the preservation and maintenance of creeks and adjacent lands must be consulted in the appropriate section of the Open Space or Conservation Element.

## 1.10 THE GENERAL PLAN AMENDMENT PROCESS

State law stresses that a General Plan can no longer be viewed as a static, "end state" document, but must adequately address the changing issues and policies of a jurisdiction during the designated "planning period." Thus, a process for considering amendments to the plan must be available to reflect changing conditions and community values.

Amendments to the plan can be initiated by the County (through the Planning Commission or Board of Supervisors) or requested by private individuals. A typical General Plan amendment ("GPA") involves changing a land use designation on a property or series of properties to allow urban development of what was previously agricultural lands within the Urban Limit Line, or to allow development of a different use or density than what is permitted under the existing plan. For example, a typical GPA will request a change in designation for a group of properties within the Urban Limit Line from "Agricultural Lands" to "Single Family Residential-High Density," or from a "Single Family" designation to a "Multiple Family" category. A GPA may also involve the reclassification of a roadway from a "collector" to an "arterial."

In accordance with Measure C - 1990, no General Plan amendment can change the 65/35 Land Preservation standard without a vote of the people by initiative. This standard limits urban development in the County to no more than 35 percent of the land in the County and preserves at least 65 percent of all land in the County for agriculture, open space, wetlands, parks and other non-urban uses.

State law generally limits the number of amendments to any mandatory element of a jurisdiction's plan to four each calendar year (Government Code Section 65358 (a)). However, State law does not limit the number of individual requests which can be packaged into each of the adopted General Plan Amendments.

When a request for a GPA is received by the County from a private individual, staff forwards the request to the Board of Supervisors with a recommendation on whether to proceed with a study of the application. After the Board authorizes the GPA study, staff collects the appropriate application fees and prepares an environmental evaluation of the proposal as required by the California Environmental Quality Act. After the environmental documentation has been prepared, staff analyzes the request and prepares a staff

recommendation. The GPA request is then scheduled for a public hearing at the appropriate planning commission (i.e., County Planning Commission, East County Regional Planning Commission, San Ramon Valley Area Planning Commission). After receiving public testimony, the commission votes to recommend approval, denial, or modification of the request. The recommendation is then sent to the Board of Supervisors for another public hearing and a final decision.

Each GPA request must be carefully weighed as to its consistency with the adopted goals and policies of the existing General Plan. In reviewing proposals for GPA's, officials should remember that the General Plan is a policy document for the entire community and that it may only be amended "in the public interest" (Government Code Section 65358(a)). Every adopted GPA must be consistent with the rest of the plan and appropriate changes need to be made to maintain consistency.

## 1.11 THE TEXT OF MEASURE C - 1988 AND MEASURE C - 1990

### MEASURE C - 1988

#### CONTRA COSTA TRANSPORTATION IMPROVEMENT AND GROWTH MANAGEMENT PROGRAM

Contra Costa Transportation Partnership Commission, adopted August 3, 1988

**MEMBER JURISDICTIONS:** Cities of Antioch, Brentwood, Clayton, Concord, El Cerrito, Hercules, Lafayette, Martinez, Orinda, Pinole, Pittsburg, Pleasant Hill, Richmond, San Pablo, San Ramon, Walnut Creek, Towns of Danville and Moraga, and the County of Contra Costa.

This Program contains the Contra Costa Transportation Improvement and Growth Management Expenditure Plan and Ordinance. The Ordinance, which is required to be adopted by the Contra Costa Transportation Authority (Contra Costa Transportation Partnership Commission) pursuant to Public Utilities Code commencing with Section 180000, is the legal document implementing the local retail transportation and use tax and specifying the method of allocation of the local retail transactions and use tax revenues and other requirements of the Measure. The Ordinance becomes effective at the close of the polls on the day of the election at which the local transportation measure is approved by the voters. The full text of the Expenditure Plan and the Ordinance are provided on the following pages.

#### CONTRA COSTA TRANSPORTATION PARTNERSHIP COMMISSION

The Contra Costa Transportation Partnership Commission, a Transportation Authority under the provisions of Public Utilities Code Section 180000, was created by the Mayors' Conference and the Board of Supervisors to provide a forum for transportation issues in Contra Costa and to propose ways to reduce traffic congestion.

**CHAIR:** Ronald K. Mullin

**VICE-CHAIR:** Sunne Wright McPeak

#### CENTRAL

Ronald K. Mullin, Councilmember, Concord

(Alternate: Carolyn Bovat, Councilmember, Clayton)

Ed Skoog, Mayor, Walnut Creek

(Alternate: Sherry Sterrett, Councilmember, Pleasant Hill)



EAST

Taylor Davis, Councilmember, Pittsburg  
(Alternate: Richard Lettman, Councilmember, Pittsburg)  
Cathryn Freitas, Councilmember, Antioch  
(Alternate: Joel Keller, Mayor, Antioch)

SOUTHWEST

Beverly Lane, Mayor, Danville  
(Alternate: Diane Schinnerer, Mayor, San Ramon)  
Avon Wilson, Vice Mayor, Lafayette  
(Alternate: Don Tatzin, Councilmember, Lafayette)

WEST

Sharon Brown, Mayor, San Pablo  
David MacDiarmid, Councilmember, Richmond

BOARD OF SUPERVISORS

Sunne Wright McPeak, District 4  
(Alternates: Robert I. Schroder District 3, Tom Powers, District 1, Nancy Fahden, District 2)  
Tom Torlakson, District 5  
(Alternates: Robert I. Schroder District 3, Tom Powers, District 1, Nancy Fahden, District 2)

MAYORS' CONFERENCE

Anna McCarty, Councilmember, Pinole  
(Alternate: Ann Earnest, Councilmember, Hercules)

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## CONTRA COSTA TRANSPORTATION IMPROVEMENT AND GROWTH MANAGEMENT EXPENDITURE PLAN STATEMENT OF PRINCIPLES

The Contra Costa Transportation Partnership Commission was created by the Mayors' Conference and the Board of Supervisors to provide a countywide forum for transportation issues and to propose ways to reduce traffic congestion.

To achieve this goal, the Transportation Partnership Commission, also established as the Transportation Authority under State Law (SB 142), has established principles to guide its efforts to develop a Countywide Comprehensive Transportation Plan and to develop an Expenditure Plan for a one-half cent retail transactions and use tax measure to be placed before Contra Costa voters in November, 1988.

The Commission's principles are as follows:

1. A balanced transportation network of highways, local streets, public transit, growth management and regional planning are necessary to preserve the quality of life and a healthy viable economy for Contra Costa residents.
2. Public input, through both the Citizen Advisory Committee and the Regional Transportation Planning Committees, is a critical element of a successful comprehensive transportation and growth management process to reduce traffic congestion.
3. State and Federal monies are insufficient to meet Contra Costa's transportation needs. A local retail transactions and use tax increase for transportation improvements is the only funding method available to local jurisdictions.
4. The Transportation Improvement and Growth Management Expenditure Plan is focused on alleviating existing traffic congestion through funding major regional projects and the establishment of a transportation and growth management process.
5. Transportation planning and growth management are needed to assure that new growth pays for the facilities required to meet the demands resulting from that growth. A cooperative planning process will be established on a countywide basis, while maintaining local authority over land use decisions and the establishment of performance standards, exclusive of operating budgets.
6. A complementary, but separate ballot measure, will provide for the acquisition and preservation of open space.

These principles are the basis of the Expenditure Plan which is presented by the Commission, its Citizen Advisory Committee, Regional Transportation Planning Committees and Technical Staff for approval by local jurisdictions and the voters of Contra Costa.

### EXPENDITURE PLAN PROJECTS AND PROGRAMS

|   | <u>Allocation</u> |
|---|-------------------|
| <u>Highways and Arterials</u>   |                   |
| Interstate 680 Corridor   | \$100,000,000     |
| North Richmond/Interstate 80 Bypass (Route 93)                          | 70,000,000        |
| Route 4 (east)  | 80,000,000        |
| Route 4 (west)  | 45,000,000        |
| Gateway/Lamorinda Traffic Program                                       | 19,000,000        |
| Major Arterials - Southwest Region                                      | 13,600,000        |
| Camino Pablo (San Pablo Dam Road Corridor)                              | 4,500,000         |
| <u>Transit</u>  |                   |
| Rail Extension - from Concord to North Concord and Eastern Contra Costa | 178,000,000       |
| Contra Costa Regional Commuterway                                       | 46,000,000        |
| BART Parking  | 5,500,000         |
| <u>Trails</u>   |                   |
| Regional Bicycle and Pedestrian Trails                                  | 3,000,000         |



Programs

|  |                   |
|--|-------------------|
| Elderly and Handicapped Transit Service                | 25,900,000        |
| Local Street Maintenance and Improvements              | 155,500,000       |
| Carpools, Vanpools, and Park-and-Ride Lots             | 8,600,000         |
| Bus Transit Improvements and Coordination              | 42,400,000        |
| Regional Transportation Planning and Growth Management | <u>10,000,000</u> |

TOTAL \$807,000,000

## EXPENDITURE PLAN PROJECTS AND PROGRAM DESCRIPTIONS - PROJECTS

Interstate 680 Corridor

Widen and improve Interstate 680 between the Alameda County Line and the Benicia-Martinez Bridge, and Route 242 between Route 4 and Interstate 680. Project involves interchange, arterial and access improvements necessary to supplement already funded improvements. On Interstate 680, the project includes, but is not limited to, interchange improvements at Concord Avenue, Willow Pass Road, and North Main Street; auxiliary lanes between El Cerro Boulevard and Bollinger Canyon Road; and the Fostoria Overcrossing. On Route 242, the project includes, but is not limited to, interchange improvements at Solano Way, Concord Avenue, and Clayton Road. The Authority may loan funds to the State to speed completion of already funded improvements to Interstate 680.

North Richmond/Interstate 80 Bypass (Route 93)

Complete an expressway between Interstate 580 (the Knox Freeway) near the Richmond-San Rafael Bridge and Interstate 80 at a new Atlas Road interchange near Hilltop.

Route 4 (East)

Widen and improve Route 4 between Willow Pass Road in Concord to at least Railroad Avenue in Pittsburg. Project includes freeway widening, lowering the grade over the Willow Pass, and interchange improvements at various locations.

Route 4 (West)

Widen and improve Route 4 to a full freeway between Interstate 80 and Cummings Skyway. Project includes reconstruction of the Route 4/Interstate 80 interchange.

Gateway/Lamorinda Traffic Program

To identify action/measures to mitigate the traffic density between Highway 24 and the Town or Moraga including cost benefit analysis. Implementation of preferred project alternative (Lamorinda cities to jointly review and establish criteria for project implementation).

Major Arterials - Southwest Region

Funds to improve major arterials as jointly determined by the local jurisdictions of the Southwest Region (Danville, Lafayette, Moraga, Orinda, San Ramon, and the portions of the County). It is the intent of the Authority that local jurisdictions give priority to the following projects: Widen San Ramon Valley Boulevard from Hartz to Alcosta; widen Dougherty Road from the County line to Crow Canyon Road; widen Crow Canyon Road from the County line to Bollinger Canyon Road; widen eastbound Route 24 off-ramp at Brookwood and up-grade signals; and improve the St. Marys Road-Glenside Drive-Reliez Station Road corridor.

Camino Pablo (San Pablo Dam Road Corridor)

Improve and realign Camino Pablo in Orinda as a two-lane roadway with protected left turn lanes and separated pedestrian and bicycle paths.

Rail Extension From Concord to North Concord and Eastern Contra Costa

Extend rail transit (BART or light rail) from the Concord BART Station to North Concord and over the Willow Pass Grade to eastern Contra Costa.

Contra Costa Regional Commuterway

Develop bus/van commute lanes connecting the residential areas of eastern and central Contra Costa with job centers in central and southern Contra Costa. The project will use available rights-of-way and planned highway widening along the Route 4 and

Interstate 680 corridors. Project shall use the Interstate 680 right-of-way in southern Contra Costa. Development of the project shall be sensitive to adjacent land uses, including a study of route realignment in Walnut Creek as part of mitigation of impacts. Project includes constructing park and ride lots, including those at Sycamore Valley and Bollinger Canyon Roads. Project also includes planning and right of way preservation for future connections to western Contra Costa.

#### BART Parking at the El Cerrito del Norte Station

Provide additional parking at the El Cerrito del Norte BART station. The Authority shall work with BART to speed completion of already funded BART parking projects and to fund additional parking at other BART stations.

#### Regional Bicycle and Pedestrian Trails

Complete regional bicycle and pedestrian trails including the Iron Horse Trail in San Ramon Valley, central Contra Costa Trails, and connections to eastern Contra Costa and the Martinez Shoreline Park.

### PROGRAMS

#### Elderly and Handicapped Transit Service

Improve paratransit service for elderly and handicapped persons, including additional service and new vehicles.

#### Local Street Maintenance and Improvements

Funds returned to local jurisdictions on a formula basis for local, subregional and regional transportation projects as determined by cities and the county, including street and road maintenance and/or transit improvements.

Funds shall be allocated annually to each local jurisdiction, provided that the Authority finds the jurisdiction in compliance with the Growth Management Program. Eighteen percent of the annual net retail transactions and use tax revenue shall be distributed as follows: each jurisdiction shall receive a basic allocation of \$50,000, and the remaining amount shall be allocated using a formula of 50% based on population and 50% based on road miles.

It is the intent of the Authority that local jurisdictions give priority to using these funds for improving major arterial streets.

#### Carpools, Vanpools, and Park and Ride Lots

Funds to provide and promote use of these commute alternatives to be allocated on a grant basis.

#### Bus Transit Improvements and Coordination

Provide funds to increase ridership, efficiency, and coordination among the transit agencies. The Authority shall allocate funds on a grant basis to support coordinated service proposals submitted by the transit agencies. Service proposals shall focus on major commute corridors such as Ygnacio Valley Road.

A plan for the implementation of transportation improvements in the Ygnacio Valley Road corridor shall be developed by the Central Contra Costa Transit Authority, in cooperation with the City of Walnut Creek.

#### Regional Transportation Planning and Growth Management

Develop a countywide Comprehensive Transportation Plan and computer model and update it every two years, provide technical support for the Regional Transportation Planning Committees, and conduct transportation and growth management studies. The Authority shall annually budget a percentage of the net tax revenue for regional transportation and growth management purposes.

### EXPENDITURE PLAN GROWTH MANAGEMENT PROGRAM

To Be Met By Local Jurisdictions For Receipt Of Local Street Maintenance and Improvements Funding

#### Introduction

The overall goal of the Growth Management Program is to achieve a cooperative process for Growth Management on a countywide basis, while maintaining local authority over land use decisions and the establishment of performance standards.

The transportation retail transactions and use tax is intended to alleviate existing major regional transportation problems. Growth management is needed to assure that future residential, business and commercial growth pays for the facilities required to meet the demands resulting from that growth.

It is the intent of the Transportation Authority to create a process that results in the maintenance of the quality of life in Contra Costa.

### Local Street Maintenance and Improvements

Portions of the monies received from the retail transactions and use tax will be returned to the local jurisdictions (the cities and the county) for use on local, subregional and/or regional transportation improvements and maintenance projects. Receipt of all such funds requires compliance with the Growth Management Program described below. The funds are to be distributed on a formula based on population and road miles.

### Allocation of Funds

The Authority will annually review and allocate funds to cities and the county. In allocating funds, the Authority shall make findings based on a statement of compliance regarding the Growth Management Program.

To receive local street maintenance and improvement funds from the Authority, each jurisdiction shall submit a statement of compliance with the Growth Management Program. Jurisdictions may use funds allocated under this provision to comply with these administrative requirements. The Authority will review this statement and make findings regarding the jurisdiction's efforts. If the jurisdiction's efforts are found satisfactory, the jurisdiction will be allocated its share of local street maintenance and improvement funding.

Because of the great variation among the jurisdictions, it is expected that the Authority will need some flexibility in determining compliance with the Growth Management Program. Generally, this flexibility may take the form of the Authority setting deadlines for achieving one or more requirements as a condition of receiving local street maintenance and improvement funds.

### Growth Management Program

To receive its local street maintenance and improvement funds, each jurisdiction must:

#### 1. Adopt a Growth Management Element

Each jurisdiction is to develop a Growth Management Element of its General Plan to be applied in the development review process. The element must include Sections 2 and 3 below, and jurisdictions must comply with Sections 4-8 below. The Authority and the Regional Transportation Planning Committees shall jointly prepare a model element and administrative procedures to guide the local jurisdictions. Local jurisdictions shall develop their Growth Management Element within one year after receipt of the Authority's model element.

#### 2. Adopt Traffic Level of Service (LOS) Standards Keyed to Types of Land Use

- o Rural - LOS low-C (70 to 74) Volume to Capacity (V/C)
- o Semi-Rural - LOS high-C (75 to 79) V/C
- o Suburban - LOS low-D (80 to 84) V/C
- o Urban - LOS high-D (85 to 89) V/C
- o Central Business District - LOS low-E (90 to 94) V/C

Based on the categories established above, each jurisdiction shall determine how the Traffic Service standards are to be applied to their General Plan land use and circulation elements, and the land areas to be defined as Rural, Semi-Rural, Suburban, Urban, and Central Business District (as suggested in the Guidelines in Appendix A). Each jurisdiction shall comply with the adopted standards. Jurisdictions may adopt more stringent standards without penalty.

Level of Service (LOS) would be measured by Circular 212 or the method described in the most commonly used version of the Highway Capacity Manual. Any issues with respect to the application of the Highway Capacity Manual or measurement of level of service shall be referred to the Authority's Technical Coordinating Committee for review and recommendation to the Authority. In the event that an intersection(s) exceeds the applicable Traffic Service standard, the Authority shall, jointly with local jurisdictions, establish appropriate mitigation measures or determine that a given intersection is subject to a finding of special circumstances.

Any intersection that presently exceeds the Traffic Service standards and which will be brought into compliance in the most current Five Year Capital Improvement Program (see Section 6) shall be considered to be in compliance with the applicable standard.

The Authority, jointly, with affected local jurisdictions, shall determine and periodically review the application of Traffic Service Standards on routes of regional significance. The review will take into account traffic originating outside of the county or jurisdiction, and environmental and financial considerations. Local jurisdictions, through the forum



provided by the Authority, shall jointly determine the appropriate measures and programs for mitigation of regional traffic impacts (see Section 5).

Capital projects necessary to meet and/or maintain the Traffic Service standards are to be included in the required Five Year Capital Improvement Program (see Section 6).

3. Adopt Performance Standards, Maintained Through Capital Projects, for the Following Items, Based on Local Criteria:

- |           |                        |                  |
|-----------|------------------------|------------------|
| a. fire   | c. parks               | e. water         |
| b. police | d. sanitary facilities | f. flood control |

Jurisdictions may have already adopted performance standards for some or all of these items.

Performance standards shall be adopted for inclusion in each local jurisdiction's General Plan. Each jurisdiction shall comply with the adopted standards. The Performance Standards should take into account fiscal constraints, and how the standards are to be applied in each jurisdiction's development review process. To ensure the continued applicability of these standards, each jurisdiction may annually review and modify their adopted standards, in consultation with special districts where appropriate, and provide an opportunity for public comment.

Capital projects, exclusive of operating budgets, to achieve and/or maintain Performance Standards are to be included in the required Five Year Capital Improvement Program (see Section 6).

4. Adopt a Development Mitigation Program to Ensure that New Growth is Paying its Share of the Costs Associated with that Growth

Local jurisdictions, for the most part, already impose fees for a variety of purposes including site specific traffic improvements. Only a few jurisdictions impose fees for regional traffic mitigation.

To meet the requirements of this Section, each jurisdiction shall:

- 1) Ensure that revenue provided from this measure shall not be used to replace private developer funding which has been or will be committed for any project.
- 2) Adopt a development mitigation program to ensure that development is paying its share of the costs associated with that development.

In addition, the Authority shall:

- 1) Develop a program of regional traffic mitigation fees, assessments or other mitigations, as appropriate, to fund regional and subregional transportation projects, as determined in the Comprehensive Transportation Plan of the Authority.
- 2) Consider such issues as jobs/housing balance, carpool and vanpool programs and proximity to transit service in the establishment of the regional traffic mitigation program.
- 3) The development mitigation program will be implemented with the participation and concurrence of local jurisdictions in determining the most feasible methods of mitigating regional traffic impacts. Existing regional traffic impact fees shall be taken into account by the Authority.

5. Participate in a Cooperative, Multi-Jurisdictional Planning Process to Reduce Cumulative Regional Traffic Impacts of Development

The Authority shall establish a forum for jurisdictions to cooperate in easing cumulative traffic impacts. This will be accomplished through the Regional Transportation Planning Committees, and be supported by an ongoing countywide comprehensive transportation planning process in which all jurisdictions shall participate.

As part of this process, a uniform database on traffic impacts will be created, based on the countywide transportation computer model.

Use of the countywide transportation computer model provides an opportunity to test General Plan(s) transportation and land use alternatives, and to assist cities and the county in determining the impact of major development projects proposed for General Plan Amendments. This would provide a quantitative basis for inter-jurisdictional negotiation to mitigate cumulative regional traffic impacts.

Input for the model shall include each jurisdiction's Five Year Capital Improvement Program of transportation projects (see Section 6) and the projects of federal, state and regional agencies such as Caltrans, transit operators, the Metropolitan Transportation Commission, etc. In addition, the computer model database will include each local jurisdiction's anticipated land use development projects expected to be constructed within the next five years.

6. Develop a Five Year Capital Improvement Program to Meet and/or Maintain Traffic Service and Performance Standards (Defined in Sections 2 and 3)

Each jurisdiction shall determine the capital projects needed to meet and/or maintain both its adopted Traffic Service and Performance Standards. Capital financial programming will be based on development to be constructed during (at a minimum) the following five year period. The Capital Improvement Program shall include approved projects and an analysis of the costs of the proposed projects as well as a financial plan for providing the improvements.

7. Address Housing Options and Job Opportunities

As part of its Five Year Capital Improvement Program and pursuant to the state mandated housing element of its General Plan, each jurisdiction shall develop an implementation program that creates housing opportunities for all income levels.

Each jurisdiction shall also address land use information as it relates to transportation demand as well as discussion of each jurisdiction's efforts to address housing options and job opportunities on a city, subregional and countywide basis.

8. Adopt a Transportation Systems Management (TSM) Ordinance or Alternative Mitigation

To promote carpools, vanpools and park and ride lots, the Transportation Authority will draft and adopt a Model Transportation Systems Management Ordinance for use by local jurisdictions in developing local ordinances for adoption and implementation. Upon approval of the Authority, cities with a small employment base may adopt alternative mitigation measures in lieu of adopting a TSM Ordinance.

## EXPENDITURE PLAN GROWTH MANAGEMENT PROGRAM

### APPENDIX A - INFORMATION ON LAND USE DEFINITION

These definitions are for information, guidance and are subject to local jurisdictions' determination in the application of Traffic Service Standards.

#### Rural

Rural areas are defined as generally those parts of the jurisdiction which have been designated in the General Plan for agricultural or open space uses and which are characterized by medium to very large parcel sizes (10 acres to several thousand acres). These areas have very low population densities, usually no more than 1 person per acre or 500 people per square mile.

#### Semi-Rural

Semi-Rural areas are defined as generally those parts of the jurisdiction that are designated in the General Plan for agricultural, open space or very low density residential uses, with predominant parcel sizes down to as small as 2 to 3 acres. These areas may support viable agricultural operations, but the operations generally occur on small to medium sized lots. These areas are also characterized by clusters of farm housing or very low density "ranchette" development. The population densities in these areas usually range between 500 to 1,000 persons per square mile (1.0 to 1.5 persons per acre).

#### Suburban

Suburban areas are defined as generally those parts of the jurisdiction that are designated in the General Plan for low and medium density single family homes; low density multiple family residences; low density neighborhood and community oriented commercial/industrial uses; and other accompanying uses. Individual structures in suburban areas are generally less than 3 three stories in height and residential lots vary from about 6,000 square feet up to 2 or 3 acres. Population densities in suburban areas fall within a wide range, from about 1,000 to 7,500 persons per square mile (1.5 to 12.0 people per acre).

#### Urban

Urban areas are defined as generally those parts of the jurisdiction that are designated in the General Plan primarily for multiple family housing, with smaller areas designated for high density single family homes; low to moderate density commercial/industrial uses; and many other accompanying uses. Urban areas usually include clusters of residential buildings (apartments and



condominiums) up to three or four stories in height and single family homes on relatively small lots. Many commercial strips along major arterial roads are considered urban areas.

Examples of urban areas in Contra Costa County are the older neighborhoods in Richmond, El Cerrito, Pittsburg, and Antioch and the downtown commercial districts in smaller cities such as Martinez, Danville, and Lafayette. Population densities in urban areas are usually at least 7,500 persons per square mile (12.0 people per acre). Employment densities in commercial areas may range up to about 15 jobs per acre.

#### Central Business District/Major Commercial Center

Central business districts or major commercial centers are defined as those areas designated in the General Plan for high density commercial and residential uses. They consist of either the downtown area of a major city (Concord, Walnut Creek, Richmond, and the Pleasant Hill BART station area) or a large business park (such as Bishop Ranch). These areas are characterized by large concentrations of jobs and consist of clusters of buildings four stories or more in height. CBD's or major commercial centers generally have high employment densities.

#### Routes of Regional Significance

Routes of regional significance are generally those that serve travel across Contra Costa County (for example, eastern Contra Costa to central Contra Costa), or between Contra Costa County and adjacent counties. Examples of routes of regional significance include: the Interstate and State Highway system, Ygnacio Valley Road, Treat Boulevard, San Pablo Avenue, San Pablo Dam Road, Lone Tree Way, etc.

### **CONTRA COSTA TRANSPORTATION IMPROVEMENT AND GROWTH MANAGEMENT ORDINANCE #88-01**

The Contra Costa Transportation Authority ordains as follows:

#### **SECTION 1 - TITLE**

This Ordinance shall be known and may be cited as the Contra Costa Transportation Improvement and Growth Management Ordinance (#88-01) which shall establish and implement a retail transaction and use tax.

#### **SECTION 2 - EXPENDITURE PLAN PURPOSES**

This Ordinance provides for the implementation of the Contra Costa Transportation Improvement and Growth Management Expenditure Plan, as approved and adopted by the Contra Costa Transportation Authority, which will result in countywide transportation facility and service improvements including highway improvements, public transit improvements, trail facility improvements, local street maintenance and improvements and related transportation programs. These needed improvements shall be funded by the retail transactions and use tax provided for in Section 3 of this Ordinance. The revenues shall be deposited in a special fund and used solely for transportation projects and programs. The specific projects and programs to be implemented as well as the required growth management program are described in the Expenditure Plan which is considered a part of this Ordinance and hereby incorporated by reference as if fully set forth herein.

The revenues received by the Authority from this Ordinance, after deduction of required Board of Equalization costs for performing the functions specified in Section 180204 of the Public Utilities Code, and for the administration of the Contra Costa Expenditure Plan commencing with Public Utilities Code Section 180200, in an amount not to exceed one percent (1%), shall be used for transportation projects and programs countywide as set forth in the Expenditure Plan and in a manner consistent with the Comprehensive Transportation Plan developed by the Authority.

#### **SECTION 3 - IMPOSITION OF RETAIL TRANSACTIONS AND USE TAX**

In addition to any other taxes authorized by law, there is hereby imposed in the incorporated and unincorporated territory of the County of Contra Costa, in accordance with the provisions of Part 1.6 (commencing with Section 7251) of Division 2 of the Revenue and Taxation Code which provisions are adopted by reference and Division 19 of the Public Utilities Code commencing with Code Section 180000, a retail transaction and use tax at the rate of one-half of one percent (1/2%) for a period not to exceed twenty years in addition to any existing or future authorized state or local transactions and use tax.

- A. Amendments. All amendments subsequent to the effective date of this Ordinance to Part 1 of Division 2 of the Revenue and Taxation Code relating to sales and use taxes and which are not inconsistent with Part 1.6 of Division 2 of the Revenue and Taxation Code, shall automatically become a part of this Ordinance; provided, however, that no such amendments shall operate so as to affect the rate of tax imposed by this Ordinance.



- B. Enjoining Collection Forbidden. No injunction of writ of mandate or other legal or equitable process shall issue in any suit, action or proceeding in any court against the State or the Authority, or against any officer of the State or the Authority, to prevent or enjoin the collection under this Ordinance, or Part 1.6 of Division 2 of the Revenue and Taxation Code, of any tax or any amount of tax required to be collected.

#### SECTION 4 – REQUEST FOR ELECTION

The Authority hereby requests the Contra Costa County Board of Supervisors place this Ordinance before the voters for approval on the November 8, 1988 ballot.

The proposition to be placed on the ballot shall contain a summary of the projects and programs and shall read substantially as follows:

Shall the Contra Costa Transportation Authority be authorized to establish, by Ordinance, a one-half of one percent retail transactions and use tax with an Article XIII B appropriations limit of \$765 million, for a period not to exceed twenty years, with the proceeds placed in a special fund solely for the transportation construction and planning program?

#### SECTION 5 – TRANSPORTATION IMPROVEMENT PROGRAM PURPOSES

In the allocation of all revenues made available from the retail transactions and use tax, the Authority shall make every effort to maximize state and federal transportation funding to the region. The Authority may amend the Expenditure Plan, in accordance with Section 8, as needed, to maximize the transportation funding to Contra Costa County. The revenues shall be allocated in accordance with the Expenditure Plan subject to the following provisions:

- A. The revenues made available for specified highway, transit and trail projects and programs shall be allocated in accordance with the Expenditure Plan, subject to the following provisions:
1. For All Projects:
    - a. No revenue shall be allocated for any state projects until the Authority has certified that Contra Costa is receiving, at a minimum, its fair share of funds from state and federal sources for transportation projects and programs. The determination of fair share shall consider all relevant factors including the degree to which the Contra Costa region is receiving its statutory county minimum funding for all budgeted, expended, and programmed state funds and federal funds available for capital projects and operating subsidies. The policies and project approval actions of the California Transportation Commission, the State Department of Transportation (hereafter referred to as Caltrans) and the federal Department of Transportation (e.g., Federal Highway Administration and Urban Mass Transportation Administration) will also be reviewed to ensure that Contra Costa is receiving full consideration in the allocation of any additional uncommitted state and federal funding. Part of the certification shall include a finding that the state has not reduced any state fund allocations to the Contra Costa region as a result of the addition of any local revenues as provided herein. The certification shall be made annually.
    - b. If the Authority finances the construction of transportation facilities by the issuance of bonds or any similar financing device, the Authority shall first allocate the funds necessary to meet all debt service requirements.
    - c. Each project shall have a local jurisdiction(s) or special district as a sponsor of the project. If there is no local jurisdiction or special district as a project sponsor for a specific Project or Program, the Authority shall be the sponsor for that Project or Program.
    - d. All state improvements to be funded with revenues as provided in this Ordinance, including project development and overall project management, shall be a joint responsibility of Caltrans, the Authority and the affected local jurisdiction(s) or special district(s). All major project approval actions including the project concept, the project location, and any subsequent change in project scope shall be jointly agreed upon by Caltrans, the Authority and the project sponsors, and where appropriate, by the Federal Highway Administration and/or the California Transportation Commission.
    - e. The Authority may use the proceeds of this Ordinance to accelerate projects which are anticipated to be funded through the State Transportation Improvement Program (STIP). It must be demonstrated by Caltrans that a meaningful acceleration can be accomplished using Authority funds

and the State must commit to refunding those proceeds in dollars or in the acceleration or completion of other Expenditure Plan Projects and Programs and/or STIP projects.

In the event that the refund of acceleration funds impact the implementation of any Expenditure Plan Project or Program, the Authority shall amend the Expenditure Plan under Section 8.

- f. Any local funds already allocated, committed or otherwise included in the financial plan for any project on the Expenditure Plan shall be made available for project development and implementation as required in the project's financial and implementation program. All local jurisdictions and special districts are encouraged to seek all available funding from private and public sources to further the purposes of the Expenditure Plan and this Ordinance.

2. For Highway Projects:

- a. Once any state highway facility or usable portion thereof is constructed to at least minimum acceptable state standards, the state shall be responsible for the maintenance and operation thereof.

3. For Transit Projects:

- a. Prior to the construction of any transit facility or usable portion thereof, the Authority, in cooperation with affected transit operators and agencies, shall determine the entity to be responsible for the maintenance and operation thereof.

4. For Trail Projects:

- a. Prior to the construction of any trail facility or usable portion thereof, the Authority, in cooperation with affected agencies, shall determine the entity(ies) to be responsible for the maintenance and operation thereof.

B. Funds made available for local street and road purposes shall be allocated annually to all local jurisdictions on a formula basis for transportation projects. In addition to local street and road projects and maintenance, funds may be used for subregional and regional transportation projects and to meet the administrative requirements of the Growth Management Project. Funds shall be allocated annually to each local jurisdiction, provided that the Authority finds the jurisdiction in compliance with the Growth Management Program. Available funds will be allocated to eligible jurisdictions as follows:

- 1. Each jurisdiction will receive a basic allocation of \$50,000, and the remaining funds will be allocated to jurisdictions by formula based fifty percent (50%) on current population and fifty percent (50%) on maintained street and road mileage.
- 2. Population figures used shall be the most current figures available from the Department of Finance. Road mileage figures shall be the most current figures from the State Controller's Annual Report of Financial Transactions for Streets and Roads.
- 3. Any new incorporation or annexations which take place after July 1 of any fiscal year shall be incorporated into the formula beginning with the subsequent fiscal year, providing there is full compliance with all other sections of this Ordinance. The Association of Bay Area Governments' population estimates of such new incorporation or annexations shall be used until such time that Department of Finance population estimates are available.

C. Funds allocated for the Programs specified in the Expenditure Plan shall be allocated pursuant to the following provisions:

- 1. Elderly and Handicapped Transit Service. These funds are intended to improve paratransit service for elderly and handicapped persons, including additional service and new vehicles. To stabilize the resources available for this program, the Authority may manage funds allocated for this program on a trust fund basis.

The Paratransit Coordinating Council shall develop a capital and operating plan for Authority approval prior to the allocation of any funds pursuant to this Ordinance. Only eligible recipients of Transportation Development Act 4.5 funds are eligible to receive retail transaction and use tax funds from the Authority.

- 2. Carpools, Vanpools and Park/Ride Lots. These funds are to be used to provide and promote use of commute alternatives. On a grant basis, the Authority shall annually allocate one percent of the net tax revenue to this program. Local jurisdictions and transit operators are eligible to seek funds from this grant program.

3. Bus Transit Improvements and Coordination. In order to receive funds under this category, bus operators and the Authority staff are to develop a coordinated program for submission to the Authority. This program should encompass all areas of the county, should involve affected jurisdictions, should focus on major commute corridors, and should work to provide a viable alternative to the single-occupant vehicle for intra-county travel.

Projects funded through the Bus Transit Improvement and Coordination Program shall include, but are not limited to:

- a. services designed to improve regional (defined by the Authority) travel and coordination among eligible transit operators to strengthen the linkages between transit service areas and linkages to rail stations in the county;
- b. transit services along major commute corridors, such as Ygnacio Valley Road and Interstate 80, to assist in relieving peak-period traffic congestion;
- c. transit services to assist in alleviating traffic during major highway construction projects; and
- d. focus on linkages between residential areas and job centers.

Projects, prior to approval by the Authority, must be endorsed by the transit operators' governing boards and be included in the respective operators' annual operating plans. All projects shall be subject to a public participation process and a financial capacity analysis as required by the Urban Mass Transportation Administration (UMTA).

Projects submitted under the Bus Transit Improvement and Coordination Program will be evaluated and reviewed by a Transit Council comprised of the General Managers (or his/her designated representative) of the eligible applicants (AC Transit, Central Contra Costa Transit Authority, Eastern Contra Costa Transit Authority, and Western Contra Costa Transit Authority) and the San Francisco Bay Area Rapid Transit District as an ex officio member, and the Authority Executive Director or his/her designated representative. On an annual basis, this Transit Council will compile a recommended Coordinated Transit Proposal consisting of the selected projects for Authority and respective policy Board approval.

The Authority shall assist with technical support to develop, coordinate, and review the Transit Council's Coordinated Service Proposal.

The Transit Council shall develop its administrative procedures, subject to approval by all eligible operators' governing boards and the Authority. The Transit Council in conjunction with the Authority shall be responsible for the development of evaluation criteria regarding the continued funding of projects, on a project-by-project basis. Criteria may included:

- o Farebox Recovery Ratio
- o Passenger Boarding per Revenue Vehicle hour
- o Operating Cost per Revenue Vehicle
- o Constrained Increases in Operating Costs
- o Transportation Development Act Standards Performance Indicators
- o Cost per Revenue Vehicle Mile
- o Cost per Trip
- o Vehicle Hours per Employee
- o Trips per Revenue Vehicle Hour
- o Trips per Revenue Vehicle Mile

These funds must:

- o be spent to alleviate traffic congestion in Contra Costa;
- o be for the purchase and operation of transit vehicles;
- o be used for operations, maintenance, and capital programs; and
- o assist the operators in the implementation of developed plans.

Bus operators are responsible for funding their service commitments at the end of the period of this tax. Bus operators are required to seek all funds available to support operations.



4. Regional Transportation Planning and Growth Management. The Authority shall provide a forum for the discussion and resolution of countywide transportation planning and related issues.

The Authority, through the retail transactions and use tax and any other available funds, shall support the planning efforts of the Regional Transportation Planning Committees established under the Authority and shall support efforts to develop and maintain an ongoing planning process with the cities and the county through the funding and development of a Comprehensive Transportation Plan.

The Authority shall coordinate its efforts with all appropriate and affected agencies in order to assure that the retail transactions and use tax and other funds are used effectively to develop and implement a comprehensive transportation planning process in cooperation with the cities and the county.

Regional transportation planning may also include studies of major new transportation facilities and programs.

## SECTION 6 - TRANSPORTATION IMPROVEMENT PROGRAM PROCEDURES

It is the intent of the Legislature and the Authority that revenues provided from this Ordinance be used to supplement existing revenues being used for transportation improvements and programs. Each local jurisdiction receiving Local Street Maintenance and Improvements funds pursuant to Section 5 shall meet the requirements in that section.

Under state enabling legislation, a jurisdiction cannot redirect monies currently being used for transportation purposes to other uses, and then replace the redirected funds with local street maintenance and improvement dollars from the retail transactions and use tax. To meet the requirements of state law, a jurisdiction must demonstrate maintenance of a minimum level of local street and road expenditure in conformance with one of the requirements below.

- A. The same level of local discretionary funds expended for street and road purposes as was reported in the State Controller's Annual Report of Financial Transactions for Streets and Roads - Fiscal Year 1986-87.
- B. If any local jurisdiction had extraordinary local discretionary fund expenditures during FY 1986-87, it may use, as a base for determining the minimum level of local discretionary funds:
  - 1. the average amount of such funds reported to the State Controller for the three-year period FY 1984-85 through FY 1986-87; or
  - 2. the net contribution obtained by subtracting those extraordinary expenses (including but not limited to SB 300 funds, assessment district contributions, development impact funds, redevelopment agency contributions, or other non-recurring contributions) from its total expenditures; or
  - 3. a petition to the Authority for special consideration. A local jurisdiction may need to revise its minimum expenditure base beyond the subtraction of extraordinary expenses. In this instance, the Authority may allow the establishment of a new base for that jurisdiction's maintenance of effort requirement. A local jurisdiction petitioning the Authority under this provision must supply evidence of the need for special consideration.

The use of provisions B. 1, 2, or 3 of this Section by a local jurisdiction shall be subject to Authority approval.

The Authority shall annually update the base year and preceding three year base period for the establishment of an annual minimum based on the information available from the State Controller's Annual Report of Financial Transactions for Streets and Roads.

An annual independent audit may be conducted to verify that the Maintenance of Effort requirements were met by the local jurisdictions. Any local jurisdiction which does not meet its Maintenance of Effort requirement in any given year may have its Local Street Maintenance and Improvements funding reduced in the following year by the amount by which the jurisdiction did not meet its required Maintenance of Effort. Such funds shall be redistributed to the remaining eligible jurisdictions.

## SECTION 7 - GROWTH MANAGEMENT PURPOSES AND PROCEDURES

In order to receive Local Street Maintenance and Improvements Funds, local jurisdictions must meet the requirements of the Growth Management Program. The specific requirements of the growth management program are described in the Expenditure Plan which is considered a part of this Ordinance and hereby incorporated by reference as if fully set forth herein. The Authority shall develop administrative requirements, in consultation with local jurisdictions, to implement the Growth Management Program.

## SECTION 8 – AMENDMENTS TO THE EXPENDITURE PLAN

The Authority may annually review and propose amendments to the Expenditure Plan to provide for the use of additional federal, state and local funds, to account for unexpected revenues, or to take into consideration unforeseen circumstances. The Authority shall establish a process for proposed Expenditure Plan amendment(s) which ensures that the affected Regional Transportation Planning Committee(s) participate in the development of the proposed amendment(s). Upon completion of this process, amendment(s) to the Expenditure Plan must be passed by a roll call vote entered in the minutes and must have a majority of the Authority concurring with the proposed amendment(s). Subsequently, the Authority shall notify the Board of Supervisors, the City Council of each city in the county and the Mayors' Conference and provide each entity with a copy of the proposed amendment(s). Pursuant to Public Utilities Code 180207, proposed amendment(s) shall become effective 45 days after notice is given, unless appealed under the process outlined in the following paragraph. The Authority shall hold a public hearing on the proposed amendment(s) within this 45-day period.

In the event that a local jurisdiction does not agree with the Authority's amendment(s), the jurisdiction's policy decision-making body must, by a majority vote, determine to appeal and shall, within 45 days after notice is given by the Authority, formally notify the Authority of its intent, in writing via registered mail, to obtain an override of the Authority's amendment(s). The appealing jurisdiction will have 45 days from the date of its determination to appeal the proposed amendment(s) to obtain resolutions supporting its appeal for an override of the amendment(s) from a majority of the cities representing a majority of the population residing in the incorporated areas of the county and from the Board of Supervisors. If a jurisdiction does not obtain the necessary resolutions supporting its appeal, the Authority's amendment(s) to the Expenditure Plan will stand.

## SECTION 9 – AMENDMENTS TO THE ORDINANCE

With the exception of Section 3, which requires a majority vote of the electors of the County of Contra Costa to be amended, this Ordinance may be amended to further its purposes. The Authority shall establish a process for proposed Ordinance amendment(s) which ensures that the Regional Transportation Planning Committees participate in proposed Ordinance amendment(s). Upon completion of that process, amendment(s) to this Ordinance must be passed by a roll call vote entered in the minutes and must have two-thirds of the Authority concurring with the proposed amendment(s).

In the event that a local jurisdiction does not agree with the Authority's amendment(s), the jurisdiction's policy decision-making body must, by a majority vote, determine to formally notify the Authority of its intent, in writing via registered mail, to obtain an override of the Authority's amendment(s). The appealing jurisdiction will have 45 days from the date the Authority adopts the proposed amendment(s) to obtain resolutions supporting its appeal for an override of the amendment(s) from a majority of the cities representing a majority of the population residing within the incorporated areas of the county and from the Board of Supervisors. If a jurisdiction does not obtain the necessary resolutions supporting its appeal, the Authority's amendment(s) to the Ordinance will stand.

## SECTION 10 – AUTHORITY COMMITTEES

It is the intent of the Authority to continue the committees which were established as part of the Transportation Partnership Commission organization. The committees are:

- A. The Regional Transportation Planning Committees which were established to develop transportation plans on a geographic basis for sub-areas of the County;
- B. The Transportation Partnership Advisory Committee which will serve as the Authority's citizens advisory committee;
- C. The Technical Coordinating Committee which will serve as the Authority's technical advisory committee.

## SECTION 11 – PRIVATE SECTOR FUNDING

Revenues provided from this Ordinance shall not be used to replace private developer funding which has been or will be committed for any project.

## SECTION 12 – BONDING AUTHORITY

"Pay as you go" is the preferred method of financing transportation improvements and programs. However, the Authority may use bond financing as an alternative method in the event that the scope of planned expenditures makes "pay as you go" financing infeasible. Upon voter approval of the Ordinance, the Authority shall have the authority to issue bonds payable from the proceeds of the tax for the construction of needed transportation facility improvements. The Authority, in allocating the annual revenues from the Ordinance, shall meet all debt service requirements prior to allocating funds for other projects.



## SECTION 13 - ADMINISTRATIVE EXPENSES

Revenues may be expended by the Authority for salaries, wages, benefits, overhead, auditing and those services including contractual services necessary to administer the Ordinance; however, in no case shall the annual expenditures for the salaries and benefits of the staff of the Authority exceed one percent of the annual revenues provided by the Ordinance. Costs of performing or contracting for project related work shall be paid from the revenues allocated to the appropriate purpose as set forth herein.

An annual independent audit shall be conducted to assure that the revenues expended by the Authority under this section are necessary and reasonable in carrying out its responsibilities under the Ordinance.

## SECTION 14 - ESTABLISHMENT OF SEPARATE ACCOUNTS

The Authority shall allocate funds to Expenditure Plan Projects and Programs as necessary to meet contractual and program obligations. The Authority may allocate funds as described but may reserve the right not to disburse monies until needed to meet contractual projects or program obligations, exclusive of the Local Street Maintenance and Improvement Funds. Each agency receiving funds from this Ordinance shall deposit said funds in a separate interest bearing Transportation Improvement Account. Any interest earned on funds allocated pursuant to this Ordinance shall be expended only for those purposes for which the funds were allocated or shall be returned to the Authority. The Authority reserves the right to audit such accounts.

## SECTION 15 - IMPLEMENTING ORDINANCES

Upon approval of this Ordinance by the voters the Authority shall, in addition to the local rules required to be provided pursuant to this Ordinance, adopt implementing ordinances, rules and administrative procedures, including Authority terms of office, and take such other actions as may be necessary and appropriate to carry out its responsibilities to implement the Contra Costa Transportation Improvement and Growth Management Expenditure Plan.

## SECTION 16 - EFFECTIVE AND OPERATIVE DATES

This Ordinance shall become effective on November 8, 1988 only if a majority of the electors voting on the Ordinance at the election held on November 8, 1988 vote to approve the Ordinance. If so approved, the provisions of this Ordinance shall become operative on April 1, 1989.

## SECTION 17 - DESIGNATION OF FACILITIES

Each project or program in excess of \$250,000 funded in whole or in part by revenues from the Ordinance shall be clearly designated in writing via signs and/or documents, during its construction or implementation as being funded by revenues from the Ordinance.

## SECTION 18 - CONTRACTS, LOCAL PREFERENCE

It is the preference of Authority, where feasible, and allowed under applicable law, to contract with Northern California organizations and businesses and to maximize contract opportunities for minority and women owned businesses. The Authority shall develop administrative procedures for contracts.

## SECTION 19 - SEVERABILITY

If any section, part, clause or phrase of this Ordinance is for any reason held invalid or unconstitutional, the remaining portions shall not be affected but shall remain in full force and effect.

If a state law is passed in the future which prevents local jurisdictions from establishing standards for any of the six Growth Management Performance Standards in the Authority's Growth Management Program, the Authority may elect to delete or modify the requirements for that Performance Standard.

## SECTION 20 - ANNUAL APPROPRIATIONS LIMIT

Article XIII(B) of the California constitution requires the establishment of an annual appropriations limit for certain governmental entities. The maximum annual appropriations limit for the Authority has been established as \$765 million. The appropriations limit shall be subject to adjustment as provided by law. All expenditures of the retail transactions and use tax revenues imposed in Section 3 are subject to the appropriations limit of the Authority.

## SECTION 21 - COORDINATION

The Authority shall consult and coordinate its actions to secure funding for the completion and improvement of the priority regional projects with the California Transportation Commission, transit operators and other interested and affected parties for the purpose of integrating its transportation improvements with other planned improvements and operations impacting the county.



In addition, the Authority shall seek all ways to expedite the completion of Expenditure Plan projects, the implementation of which is the responsibility of other agencies. Use of acceleration as described in Section 5.A.1.e as well as supporting and advocating for Caltrans to contract out are both means through which the Authority can work to achieve timely project implementation.

## SECTION 22 – ALLOCATION OF RELEASED FUNDS

If additional funds become available for a specific project or projects on the Expenditure Plan, the Authority may reallocate the retail transactions and use tax funds released by the receipt of those additional funds. In the allocation of the released funds, the Authority shall give first priority to Expenditure Plan Project and Programs which provide congestion relief in the geographic region which received the additional funds. Second priority shall be given to other projects and programs within the affected geographic region which may be placed on the Expenditure Plan through the amendment process described in Section 8. Third priority shall be given to all other Expenditure Plan Projects and Programs. Fourth priority shall be given to other projects of regional significance which may be placed on the Expenditure Plan through the amendment process described in Section 8.

## SECTION 23 – ALLOCATION OF EXCESS FUNDS

In the event, that the retail transactions and use tax revenues generated by this Ordinance are greater than projected or contingency fund requirements are less than projected, the Authority may allocate those excess funds. Determination of when the contingency funds become excess funds shall be established by a process to be developed by the Authority.

In the allocation of excess funds, the Authority shall give first priority to Expenditure Plan Projects and Programs, and second priority to other projects of regional significance which are consistent with the Comprehensive Transportation Plan of the Authority and may be placed on the Expenditure Plan through the amendment process described in Section 8.

## SECTION 24 – TRANSPORTATION AUTHORITY EMINENT DOMAIN

The Authority will not use its power of eminent domain as provided in Public Utilities Code Section 180152.

## SECTION 25 – SUNSET OF THE AUTHORITY

In the event that this Ordinance does not succeed in obtaining a majority of the vote of the electorate at the November, 1988 election, the legal entity known as the Contra Costa Transportation Authority will sunset within 30 days after the election.

## SECTION 26 – CALDECOTT TUNNEL

The Authority shall make every effort to secure state and/or federal funds to increase the capacity of the Caldecott Tunnel. The Authority shall work with other affected jurisdictions, particularly Alameda County and the City of Oakland to assist this effort. The Authority may, subject to the provisions of this Ordinance, loan funds to the State of California to commence the preliminary planning for this project.

## SECTION 27 – MAJOR ARTERIALS

The Southwest Regional Transportation Planning committee will determine the financial programming of the Major Arterials – Southwest Region Project. For the Southwest Arterial Projects, it is the intent of the Authority that local jurisdictions give priority to the following projects: Widen San Ramon Valley Boulevard from Hartz to Alcosta; widen Dougherty Road from the County line to Crow Canyon Road; widen Crow Canyon Road from the County line to Bollinger Canyon Road; widen and eastbound Route 24 off-ramp at Brookwood and upgrade signals; and improve the St. Marys Road-Glenside Drive-Reliez Station Road corridor.

For the I-680 Corridor project, the central county Regional Transportation Planning Committee (TRANSPAC) may use up to \$20 million of I-680 central county funds for improvements to arterials. TRANSPAC will determine the programming of these funds.

## SECTION 28 – DEFINITIONS

- A. **Authority.** Means the Contra Costa Transportation Authority. The Contra Costa Transportation Partnership Commission has been designated as the Contra Costa Transportation Authority by the Contra Costa County Board of Supervisors with the concurrence of a majority of the cities having a majority of the population within the incorporated area of the County.
- B. **Bicycle and Pedestrian Trail Facilities.** Means all purposes necessary and convenient to the design, right-of-way acquisition and construction of facilities intended for use by bicycles and pedestrians. Bicycle facilities shall also mean facilities and programs which help to encourage the use of bicycles such as secure bicycle parking facilities, bicycle promotion programs and bicycle safety education programs.

- C. Bonds. Means indebtedness and securities of any kind or class, including but not limited to bonds, notes, revenue anticipation notes, commercial paper, and certificates of participation.
- D. Comprehensive Transportation Plan. Means the long-range transportation planning document prepared and adopted by the Authority.
- E. Expenditure Plan. Means the expenditure plan required by Section 180206 of the Public Utilities Code to be adopted prior to the call of an election on this Ordinance. The expenditure plan includes the allocation of revenues for each authorized purpose.
- F. Highways and Arterials. Means all purposes necessary and convenient to the design, right-of-way acquisition, and construction of highway and arterial street facilities, including all interstate highway routes and any other facilities so designated in the Expenditure Plan.
- G. Local Street Maintenance and Improvements. Means all purposes necessary and convenient to the maintenance, operation and construction of local streets and roads and transit purposes. Local street and road purposes shall include all purposes allowable under Article XIX, Section 1(a) of the State Constitution.
- H. Transit. Means all purposes necessary and convenient to the construction, operation and maintenance of transit services and facilities including the acquisition of vehicles and right-of-way. Transit services include, but are not limited to, bus, light rail, rapid transit and commuter rail services and facilities.

PASSED AND ADOPTED by the Contra Costa Transportation Authority, the 3rd day of August, 1988 by the following vote:

AYES: Sharon Brown, Taylor Davis, Cathryn Freitas, Beverly Lane, David MacDiarmid, Anna McCarty, Sunne Wright McPeak, Ed Skoog, Tom Torlakson, Avon Wilson, and Ronald K. Mullin, Chair

NOES: None

ABSENT: None

/s/ Ronald K. Mullin  
Chair

August 3, 1988  
Date

## ACKNOWLEDGEMENTS

### Transportation Partnership Advisory Committee

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Guy Bjerke (Chambers of Commerce)  
Ron Berkhimer (Contra Costa Taxpayers Association)  
    Alternate: Don Christen  
Byron Campbell, Chair (Residents for a Better Contra Costa)  
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The Transportation Partnership Commission would like to acknowledge the Contra Costa Council's generosity for providing funding to secure secretarial services and to Smith, Gray and Company for their assistance in the development of this program.

**MEASURE C - 1990****THE 65/35 CONTRA COSTA COUNTY LAND PRESERVATION PLAN****TEXT OF PROPOSED ORDINANCE**

The People of the County of Contra Costa hereby ordain as follows:

**Section 1 Title**

This ordinance shall be entitled the "65/35 Contra Costa County Land Preservation Plan."

**Section 2 Summary**

Through this ordinance the people approve the policies contained in the 65/35 Contra Costa County Land Preservation Plan and direct the Contra Costa County Board of Supervisors to reflect those policies in the new general plan (the "New General Plan") for the County. These "65/35 Land Preservation Plan" policies are intended to:

- o Restrict urban development to 35% of the land in the County and preserve 65% of the land in the County for agriculture, open space, wetlands, parks and other non-urban uses;
- o Prohibit any changes to the 65/35 Land Preservation Plan standard except by a vote of the people;
- o Create an Urban Limit Line to identify the outer boundaries of urban development in the County;
- o Protect and promote the economic viability of agricultural land by appropriate standards and policies, including a policy that increases the minimum parcel size for prime productive agricultural land outside the Urban Limit Line to 40 acres;
- o Protect open hillsides and significant ridgelines throughout the County from development by zoning and other measures;
- o Manage growth in the County by allowing new development only when infrastructure and service standards are met;
- o Advise the Local Agency Formation Commission to honor the County's 65/35 Land Preservation standard, Urban Limit Line and growth management standards in annexation and incorporation decisions;
- o Promote cooperation between the County and cities to preserve agricultural and open space land, wetlands and parks, by requiring the County to pursue preservation agreements with cities where feasible; and
- o Safeguard the County's obligation to provide its fair share of safe, decent and affordable housing.

**Section 3 Statement of Findings and Policy**

The voters of Contra Costa County approve the 65/35 Land Preservation Plan based on the following facts and considerations:

- A. Contra Costa County (the "County") is nearing completion of a major revision of its general plan. The New General Plan will represent a comprehensive, balanced approach for accommodating the diverse variety of needs and interests of the people of the County. To maximize public participation in preparing the New General Plan, the County has held thousands of hours of public meetings and received extensive written comments on the New General Plan. All segments of Contra Costa County society have participated, including ranchers, developers, farmers, environmentalists, labor groups, cities, special districts, business and industrial associations. The proposed New General Plan expresses the variety of concerns and hopes stated in this public process. The proposed New General Plan consists of over 400 pages and represents years of research and analysis by the staff of the County Community Development Department and outside consultants. In addition, in accordance with the California Environmental Quality Act ("CEQA"), the County has prepared and circulated for public review a draft environmental impact report ("EIR") to assess the environmental impacts of the New General Plan. The draft EIR, comments and responses to comments have been circulated to agencies and individuals and readily available at County offices, libraries and other public places.
- B. During this process of preparing the New General Plan, the voters expressed a number of concerns related to future planning and development of the County. The most important of those concerns were:
  - (1) Growing urbanization of the County is threatening the long term viability of the County's agricultural and open space land, parks, wetlands, hillsides and ridgelines. Preservation and buffering of agricultural land is critical to maintaining a healthy and competitive agricultural economy and assuring a balance in land uses in the

County. Moreover, preservation and conservation of open space, wetlands, parks, hillsides and ridgelines is imperative to ensure the continued availability of unique habitats for wildlife and plants, to protect the unique scenery in the County and to provide a wide range of recreational opportunities for County residents.

- (2) Growth is a natural and proper part of the life of the community. However, growth should be managed responsibly to preserve the quality of life for current and future generations. New development should be guided into appropriate locations, and should be allowed only after appropriate infrastructure (transportation, schools, water, fire and police protection) can be assured.
  - (3) There is a critical need to make decent, safe and affordable housing available to all Contra Costa County residents. Fair housing opportunities should prevail for all economic segments of the County, and housing should be available in reasonable proximity to employment centers. In addition, the County's land use policies should not restrict growth so severely that they preclude these affordable housing opportunities.
- C. The 65/35 Land Preservation Plan implemented in Section 4 is intended to address these concerns of the voters. The 65/35 Land Preservation Plan is intended to carry out the voters' desire to both preserve agriculture and open space land, parks, wetlands, hillsides and ridgelines, manage growth to protect the quality of life, and provide for the County's fair share of decent, safe and affordable housing.
- D. It is appropriate and reasonable to present to the voters for their approval the key policies that would guide the County's future under the New General Plan, as those policies are set forth in the 65/35 Land Preservation Plan. With the guidance and confirmation the voters can provide through approval of the 65/35 Land Preservation Plan, the County can complete the environmental review and detailed documentation necessary for implementing these principles.
- E. The approval of the 65/35 Land Preservation Plan by the voters is not intended to be an amendment of the County's existing general plan. Rather, the 65/35 Land Preservation Plan, if approved by the voters, is intended to be reflected in the County's New General Plan and will thereby become the official policy of the County with respect to the preservation of open space and agricultural lands and the protection of valuable environmental resources such as wildlife, wetlands, hillsides and ridgelines.

#### Section 4 Implementation of 65/35 Land Preservation Plan

To implement the 65/35 Land Preservation Plan, the following chapter is hereby added to the Contra Costa County Ordinance Code as Chapter 82-1 and numbered appropriately:

##### A. New General Plan

The County shall adopt a new general plan by December 31, 1990 (the "New General Plan").

##### B. 65/35 Land Preservation Plan

The policies contained in this chapter shall be reflected in the New General Plan, as ultimately adopted by the Board of Supervisors in accordance with the California Environmental Quality Act and State Planning Law.

##### (1) 65/35 Land Preservation Standard

Urban development in the County shall be limited to no more than 35% of the land in the County. At least 65% of all land in the County shall be preserved for agriculture, open space, wetlands, parks and other non-urban uses.

##### (2) Changes to the 65/35 Land Preservation Plan

No change shall be made in the New General Plan after its adoption that would result in greater than 35% of the land in the County being permitted for urban development. This limitation shall not prevent any increase in agriculture, open space, parks, wetlands or other nonurban uses to greater than 65% of the land in the County.

##### (3) Urban Limit Line

To ensure the enforcement of the 65/35 standard set forth in (B)(1) above, an Urban Limit Line shall be established, in approximately the location depicted on the illustrative 65/35 Contra Costa County Land



Preservation Plan Map attached as Exhibit A. The Urban Limit Line shall be incorporated into the County's Open Space Conservation Plan. The Urban Limit Line shall limit potential urban development in the County to 35% of the land in the County and shall prohibit the County from designating any land located outside the Urban Limit Line for an urban land use. The criteria and factors for determining whether land should be considered for location outside the Urban Limit Line should include (a) land which qualifies for rating as Class I and Class II in the soil Conservation Service Land use Capability Classification, (b) open space, parks and other recreation areas, (c) lands with slopes in excess of 26 percent, (d) wetlands, and (e) other areas not appropriate for urban growth because of physical unsuitability for development, unstable geological conditions, inadequate water availability, the lack of appropriate infrastructure, distance from existing development, likelihood of substantial environmental damage or substantial injury to fish or wildlife or their habitat, and other similar factors.

(4) Growth Management

In accordance with the Contra Costa Transportation Improvement and Growth Management Program adopted on August 3, 1988, the County shall manage growth by allowing new development only when infrastructure and service standards are met for traffic levels of service, water, sanitary sewer, fire protection, public protection, parks and recreation, flood control and drainage and other such services. Land located inside the Urban Limit Line may be considered for changes in designated land uses, subject to County growth management policies and any other applicable requirements. Location of land within the Urban Limit Line shall provide no guarantee that the land may be developed. If land is developed within the Urban Limit Line, a substantial portion of this land shall be retained for open space, parks and recreational uses.

(5) Agricultural Protection Policies: Minimum Parcel Sizes

The County shall establish standards and policies designed to protect the economic viability of agricultural land. These standards and policies shall include a minimum parcel size for prime productive agricultural land located outside the Urban Limit Line to 40 acres. These standards and policies may also include, but shall not necessarily be limited to, preservation agreements, conservation easements, clustering, establishment of an agricultural soils trust fund, and agricultural mitigation fees.

(6) Hillside Protection

Development on open hillsides and significant ridgelines throughout the County shall be restricted, and hillsides with a grade of 26% or greater, shall be protected through implementing zoning measures and other appropriate actions.

(7) Changes to the Urban Limit Line

There shall be no change to the Urban Limit Line that violates the 65/35 standard set forth in B(1) above. After adoption of the New General Plan, as long as there is no violation of the 65/35 standard, the Urban Limit Line can be changed by a 4/5 vote of the Board of Supervisors after holding a public hearing and making one or more of the following findings based on substantial evidence in the record:

- (a) a natural or man-made disaster or public emergency has occurred which warrants the provision of housing and/or other community needs within land located outside the Urban Limit Line;
- (b) an objective study has determined that the Urban Limit Line is preventing the County from providing its fair share of affordable housing, or regional housing, as required by state law, and the Board of Supervisors finds that a change to the Urban Limit Line is necessary and the only feasible means to enable the County to meet these requirements of state law;
- (c) a majority of the cities that are party to a preservation agreement and the County have approved a change to the Urban Limit Line affecting all or any portion of the land covered by the preservation agreement;
- (d) a minor change to the Urban Limit Line will more accurately reflect topographical characteristics or legal boundaries;
- (e) a five (5) year periodic review of the Urban Limit Line has determined, based on the criteria and factors for establishing the Urban Limit Line set forth in B(3) above, that new information is

available (from city or County growth management studies or otherwise) or circumstances have occurred, that warrant a change to the Urban Limit Line;

- (f) an objective study has determined that a change to the Urban Limit Line is necessary or desirable to further the economic viability of the East Contra Costa County Airport, and either (i) mitigate adverse aviation related environmental or community impacts attributable to Buchanan Field, or (ii) further the County's aviation related needs; or
- (g) a change is required to conform to applicable California or federal law.

Any such change shall be subject to referendum as provided by law. Changes to the Urban Limit Line under any other circumstances shall require a vote of the people.

(8) Annexations and Incorporations

The Local Agency Formation Commission ("LAFCO") shall be advised to (a) respect and support the County's 65/35 Preservation Standard, Urban Limit Line and growth management standards when considering requests for incorporation or annexation to cities or service districts, (b) apply the stricter of the growth management standards of either the County the incorporating city or the annexing city or service district, when considering requests for incorporation or annexations of land to cities or service districts, and (c) require unincorporated land located within the Urban Limit Line that is included in the incorporation of a new city or annexed to a city to provide a fair share of affordable housing when and if such land is developed.

(9) Housing

As required by the State Planning Act, the County shall periodically review and update the New General Plan to conform to state housing requirements and to ensure its capacity to accommodate a variety of housing types and prices throughout the County. In accordance with the provisions of B(7) above, the Board of Supervisors may make findings of necessity that the Urban Limit Line should be changed to allow the County to meet its fair share of affordable housing and other state housing requirements.

(10) Cooperation with Cities

To the extent feasible, the County shall enter into preservation agreements with cities in the County designed to preserve certain land in the County for agriculture and open space, wetlands or parks.

C. Application to Projects Prior to Adoption of New General Plan

From the effective date of this chapter to adoption of the New General Plan, prior to issuing a permit for any project or adopting any legislation which requires an initial study under the California Environmental Quality Act, and prior to issuing a permit for any demolition, conversion, or change or use, and prior to taking any action which requires a finding of consistency with the general plan, the County shall adopt findings as to whether or not the proposed project or legislation is consistent with the policies established above.

D. Duration

The provisions of this chapter shall be in effect until December 31, 2010, to the extent permitted by law.

E. No Violation of Law by this Ordinance

- (1) Nothing in this chapter shall be construed or interpreted in such a manner as to operate to deprive any landowner of substantially all of the market value of his/her property or otherwise constitute an unconstitutional taking without compensation. If application of any of the provisions of this chapter to any specific project or landowner would create an unconstitutional taking, then the Board of Supervisors may allow additional land uses, otherwise adjust permit requirements or take such other actions to the extent necessary to avoid what otherwise might be construed to be a taking. Any such additional land uses or other adjustments shall be designed to carry out the goals and provisions of this section to the maximum extent feasible.
- (2) Nothing contained in this chapter shall constitute an amendment of the existing general plan. Upon approval of this chapter by the voters, the County shall take all necessary and appropriate steps to reflect the policies of the 65/35 Land Preservation Plan in the New General Plan for the County, consistent with the requirements

of CEQA and the State Planning Law. Nothing contained herein shall prevent the County from complying with applicable requirements of state law relating to the adoption and amendment of general plans.

F. Definitions

- (1) As used in this chapter, the phrase "land within the County" shall mean all of the acreage within the boundaries of Contra Costa County except the water area of the County west of Stake Point.
- (2) As used in this chapter, the term "non-urban uses" shall mean rural residential and agricultural structures allowed by applicable zoning and facilities for public purposes, whether privately or publicly funded or operated, which are necessary or desirable for the public health, safety or welfare or by state or federal law.

Section 5 Amendment and Repeal

This ordinance may be amended or repealed only by a vote of the people, except as expressly provided herein.

Section 6 Conflicts with Other Measures

The following provisions shall apply in the event that the voters approve any other initiative or referendum related to the County's general plan contemporaneously with approval of this ordinance:

- (1) In the event that the voters approve any other initiative or referendum related to the County's general plan, or zoning, planning or land use regulations within the County contemporaneously with approval of this ordinance and this ordinance receives a higher number of votes than such other initiative or referendum, the provisions of this ordinance shall supersede and are hereby deemed to be inconsistent with the provisions of such other initiative or referendum, and no provision of such other initiative or referendum shall be implemented. This provision shall apply regardless of whether all or any part of this ordinance is invalidated by a court of competent jurisdiction.
- (2) In the event that the voters approve any other initiative or referendum related to the County's general plan contemporaneously with the approval of this ordinance, and such other initiative or referendum receives a higher number of votes than this ordinance, the provisions of this ordinance shall nevertheless be implemented to the maximum extent legally feasible.

Section 7 Severability

If any portion of this ordinance is hereafter determined to be invalid by a court of competent jurisdiction, all remaining portions of this ordinance shall remain in full force and effect. Each section, subsection, sentence, phrase, part or portion of this ordinance would have been adopted and passed regardless of whether any one or more sections, subsections, sentences, phrases, parts or portions was declared invalid or unconstitutional.

1. State of California Office of Planning and Research, General Plan Guidelines, Sacramento, June 1987, pages 14-18 (paraphrased).

2. Ibid., page 17.







## 2. PLANNING FRAMEWORK

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## GENERAL PURPOSE JURISDICTIONS

This Plan uses the common distinction made by residents to differentiate between the various geographic sub-areas of the County. Six different sub-areas of Contra Costa are illustrated in Figure 2-1. The County is usually considered as comprising three distinct areas: West County, Central County, and East County. Central County is further generally considered as comprising North Central County, Lamorinda, and the San Ramon Valley. East County is composed of the Pittsburg-Antioch area and "Other East County." Each of these areas is described below.

### West County

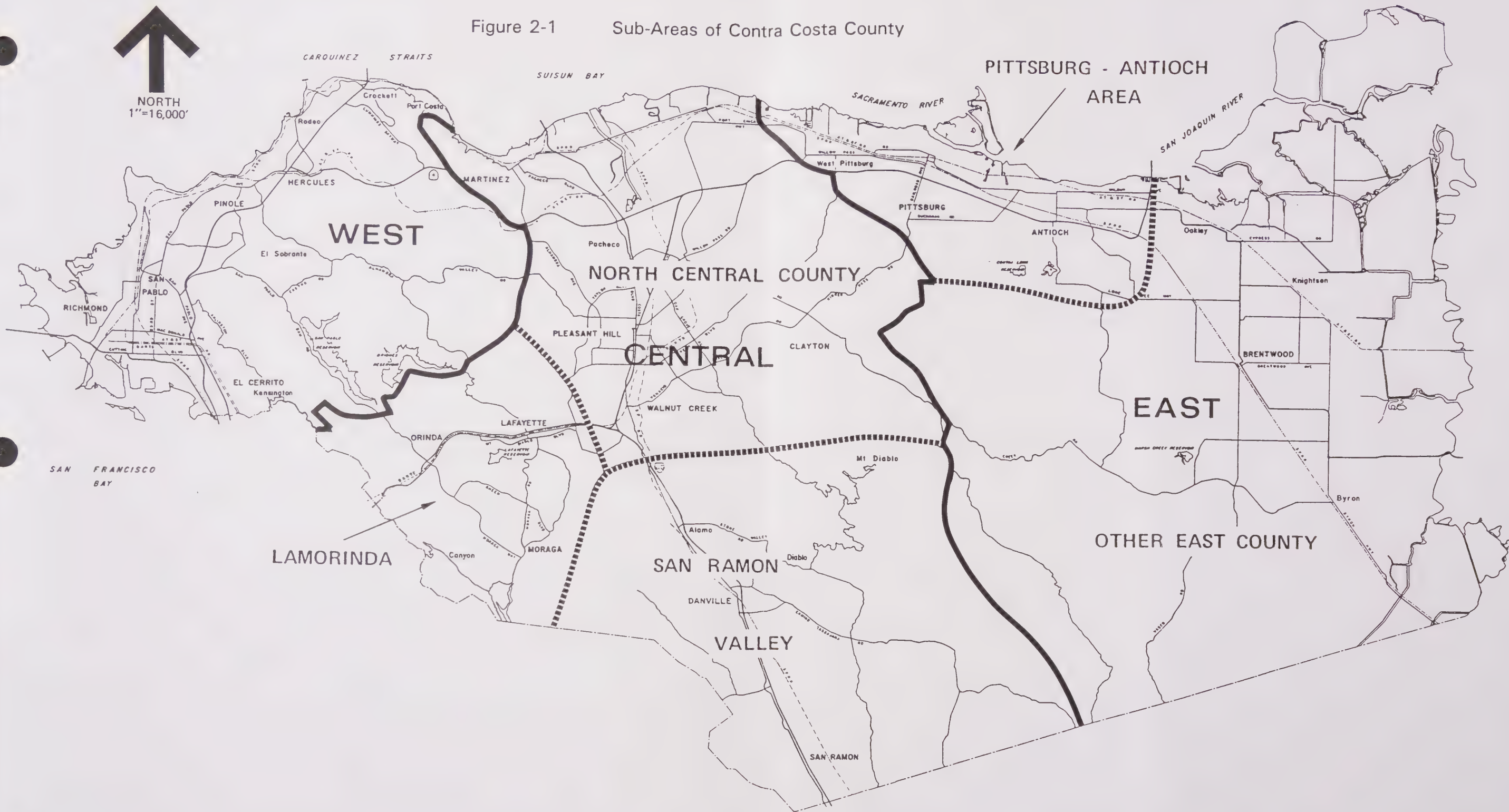
The West County area includes the urbanized shoreline of the San Francisco and San Pablo Bays, which is separated from the rest of the County by the Briones Hills and the open space watershed lands owned by the East Bay Municipal Utility District. West County was among the first areas of the County to develop with medium density suburbs and industry. The western sub-area includes the cities of El Cerrito, Richmond, San Pablo, Pinole, and Hercules, as well as the unincorporated communities of Kensington, El Sobrante, Rodeo, Crockett, and Port Costa.

### Central County

The Central County area is the largest of the three areas, including ten of the eighteen cities in Contra Costa and over half of the total population. Central County is composed of mostly low density bedroom communities that have developed in the flat valleys between the East Bay Hills and the Diablo Range to the east, extending north and south of Mt. Diablo. The cities within this area are as follows:

- o Lamorinda: Lafayette, Moraga and Orinda, as well as the unincorporated area of Canyon;
- o North Central County: all of the cities and unincorporated communities along the northern Interstate 680 corridor – the cities of Walnut Creek, Concord, Clayton, Pleasant Hill, and Martinez and the unincorporated areas of Pacheco, Vine Hill, Clyde, the Pleasant Hill BART station, and Saranap;
- o San Ramon Valley: unincorporated Alamo, the cities of Danville and San Ramon, and the unincorporated Blackhawk and Tassajara area.

Figure 2-1 Sub-Areas of Contra Costa County







### East County

East County is the largest land area in the County and includes much of the hilly terrain of the Diablo Range:

- o Pittsburg-Antioch area, which stretches along Route 4 from the Willow Pass grade northeast of Concord to Route 84 near Oakley. The Pittsburg-Antioch area includes the two cities, as well as the unincorporated community of Bay Point.
- o "Other East County" refers to the remainder of the East County sub-area, which includes the city of Brentwood, and the unincorporated areas of Oakley (including the Oakley Community Center area), Bethel Island, Knightsen, Byron, and Discovery Bay.

## **2.3 POLITICAL SETTING**

This section first discusses as background, the political history of the unincorporated areas, and their involvement with the cities. Then the relationship between the County General Plan and the cities within the County is described. Finally, the section discusses the major local, regional and State governmental agencies and groups that make or affect planning decisions for the unincorporated areas.

### **POLITICAL HISTORY OF UNINCORPORATED AREAS**

The unincorporated area includes a variety of urban pockets within every County area. A number of physical and political factors have caused these geographic areas to remain unincorporated.

#### Urban Areas

Historically, many property owners have preferred that their area remain under the County's jurisdiction (unincorporated) rather than be incorporated into a city because, before the passage of Proposition 13 in 1978, property taxes were appreciably lower. Additionally, many property owners preferred the less developed character of these areas.

Cities chose not to annex particular unincorporated pockets for a number of other reasons. Sanitary sewers, curbs, gutters, sidewalks, street lights and other standard improvements were not required by the County at the time many of the unincorporated pockets were developed. As a result, cities were hesitant to annex unincorporated pockets where major capital expenditures were required to bring them up to city standards. Today, these factors continue to discourage the annexation of already urbanized unincorporated pockets by adjacent cities.

### Rural Areas

Within Contra Costa County, the vast majority of unincorporated lands are located in rural (or non-urban) areas. These areas remain undeveloped or developed at very low densities. In the past, public policy has discouraged the annexation of the rural unincorporated areas to cities because most rural lands are located far from the boundaries of cities, often making the provision of urban services from cities physically impractical and economically unfeasible. It is for these reasons, as well as to discourage urban sprawl, that the Local Agency Formation Commission (LAFCO) has not assigned city spheres of influence for most unincorporated rural lands. This General Plan provides a framework for the interplay between growth management, the Urban Limit Line and the 65/35 Land Preservation Standard as General Plan policies affecting, among other things, growth in and the preservation of rural areas.

### RELATIONSHIP BETWEEN THE COUNTY GENERAL PLAN AND THE CITIES

Planning is a required function of local government in California.<sup>1</sup> The Board of Supervisors and the Planning Commission, with the assistance of the Community Development Department, are responsible for planning for unincorporated areas. Likewise, each of the County's eighteen incorporated cities plans for lands within its own jurisdiction. Preparation of the General Plan required an understanding of the General Plans of these 18 cities and development and growth contemplated in those general plans. To develop that understanding, the County staff collected and summarized the Land Use Elements of the city General Plans in a document entitled Summary of City and County General Plans. Among other things, this document noted differences between County and City Plans for city Spheres of Influence as well as differences in County and city schemes for classifying land uses. To construct a uniform Countywide land use data base, the City General Plans were translated into uniform land use designations. The vacant lands within cities and the County were then "built out" to enable the County to develop estimates of population, jobs and housing in the County.

### Spheres of Influence and LAFCO

A Sphere of Influence (SOI) boundary is adopted for each city and special district by the Local Agency Formation Commission (LAFCO) of Contra Costa County. The Sphere line includes lands outside the jurisdictional boundaries of the city or district which are expected to be ultimately annexed and served by the agency.

### Local Agency Formation Commission (LAFCO)

The Local Agency Formation Commission was created by the Legislature in 1963 and is responsible for the discouragement of urban sprawl and the encouragement of the orderly formation and development of local

governmental agencies. There is a LAFCO in each county in California except the City and County of San Francisco. LAFCO is a seven-member commission comprised of two city council members, two supervisor members, two special district members and one public member.

The three acts that empower LAFCO to carry out its mandate are the Knox-Nisbet Act, the District Reorganization Act and the Municipal Organization Act. These laws require LAFCO to decide on proposals for: the incorporation of cities, the annexation or detachment of territory from a city, the consolidation of two or more cities, the formation of a special district, and the dissolution, reorganization, consolidation or merger of a special district.

In addition, the Commission has the responsibility of determining the sphere of influence, or ultimate service area boundary, of each city and special district in the County. In recent years, there have been a number of sphere of influence studies completed by LAFCO that have explored the ultimate service area boundaries for some of the major unincorporated areas.

#### City-County Development Procedures

Development within a city's Sphere of Influence may be approved and constructed under County jurisdiction or in the alternative, a developer may request that a project involving property within the Sphere be approved and annexed into the city. A city must then adopt a General Plan designation for the property (if the city's General Plan does not already indicate a designation for it) and pre-zone the parcel (indicate what the zoning will be when it is annexed). The County LAFCO then votes on the annexation request.

Also, there is an increasing effort for the County and cities, in certain circumstances, to conduct joint planning. Figure 2-2 illustrates the relationship between a hypothetical incorporated territory, its Sphere of Influence and its extended planning area. Figure 2-3 illustrates all of the Sphere of Influence boundaries for the 18 cities and their unincorporated and incorporated limits. Due to the fact that these SOI boundaries often change, the reader should consult with LAFCO or the County to determine the most current SOI information.

#### Trends In City Growth

Over the last decade as unincorporated land areas adjacent to cities have been annexed and developed, and the incorporation of new cities has been approved, the County's role in approving and servicing new residential areas has shrunk dramatically. In 1980, approximately 44 percent of all the housing that was built occurred under County jurisdiction, with the remainder (56 percent) approved by the cities.



The cities' portion of residential growth climbed to 67 percent of the total in 1982, and reached 77 percent in 1984, following the incorporation of Danville and San Ramon. Since 1984, the portion of growth occurring in the County as compared with the cities has remained steady at a ratio of about three quarters of the new housing developed within the cities and one quarter built in the County. This illustrates that since the County has very little control over the type or extent of development that occurs within city boundaries, to a large extent it cannot control the growth which occurs within cities.

#### City-County Issues Related To Measure C - 1988

Measure C - 1988 added one-half cent to the sales tax within the County for the purpose of funding needed transportation improvements. Approximately 18 percent of the approximately \$800 million collected through the 20-year term of the tax can be allocated to cities and the County if they have adopted Growth Management Elements in their local General Plans. The measure sets forth specific intersection traffic service levels keyed to land use type. In general, the lowest levels of service are allowed in the highest density areas (central business district) and highest in the lowest density areas (rural). Projects which would affect traffic service levels at intersections must include mitigation measures for the effects, or they cannot be approved. Additional standards for sewer water, storm drainage, police, fire, and parks must also be included in local General Plans, although the measure gives these services to the local agency.

#### City-County Issues Related to Measure C - 1990

Measure C - 1990 established a 65/35 Land Preservation Standard which limits urban development to no more than 35 percent of the land in the County and preserves at least 65 percent of land in the County for agriculture, open space, wetlands, parks and other non-urban uses. The urban areas within cities (and the urban growth of cities in the County) is factored into this 35 percent ceiling for urban growth in the County. (See Land Use, Open Space Elements.)

Measure C - 1990 (and therefore this General Plan) also provides that the County shall, to the maximum extent feasible, enter into preservation agreements with cities in the County designed to preserve land for agriculture, open space, wetlands and parks.

This General Plan, in accordance with Measure C - 1990, also provides for County - City cooperation on growth policies through the annexation and incorporation process. (See Section 3, Land Use Element.)

## ROLE OF THE BOARD OF SUPERVISORS, PLANNING COMMISSIONS, COUNTY ADMINISTRATOR, AND COMMUNITY DEVELOPMENT DEPARTMENT

### Board of Supervisors

The Board of Supervisors, a five-member body, has direct jurisdiction for land use in unincorporated areas. As the County's legislative body, it is the Board of Supervisors that ultimately adopts the General Plan and acts on zoning and subdivision matters for unincorporated areas.

### County Planning Commission

The Planning Commission advises and makes recommendations to the Board of Supervisors on the General Plan, zoning, and subdivision proposals. Certain other decisions made by the Commission are subject to appeal by the Board of Supervisors. The Planning Commission consists of seven members, each appointed by the Board of Supervisors.

### Area Planning Commission

The County Board of Supervisors has established two area Planning Commissions: the East County Regional Planning Commission ( seven members) and the San Ramon Valley Area Planning Commission (seven members). While the County Planning Commission reviews and recommends on matters of County-wide concern, the area planning commissions review entitlements within their respective jurisdictions.

### Zoning Administrator

The Zoning Administrator holds public hearings on variance permits, development plans minor subdivisions and some major subdivisions. The Zoning Administrator also may review and recommend environmental documentation under CEQA and make recommendations on development agreements.

Figure 2-2

## Conceptual City Jurisdiction, Sphere of Influence and Planning Area Relationships

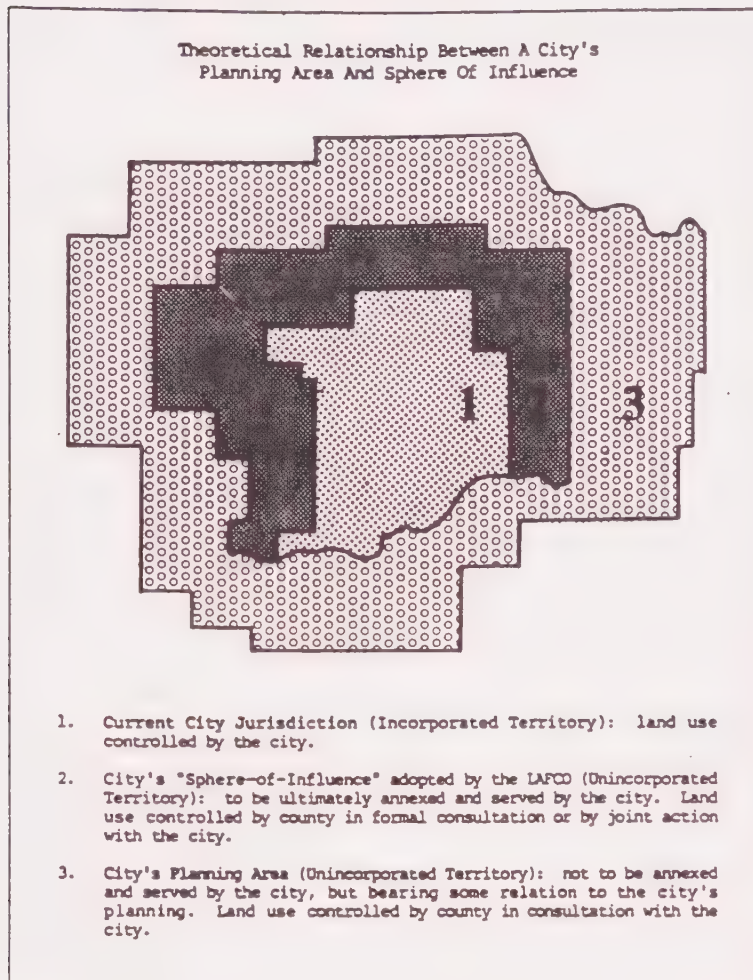
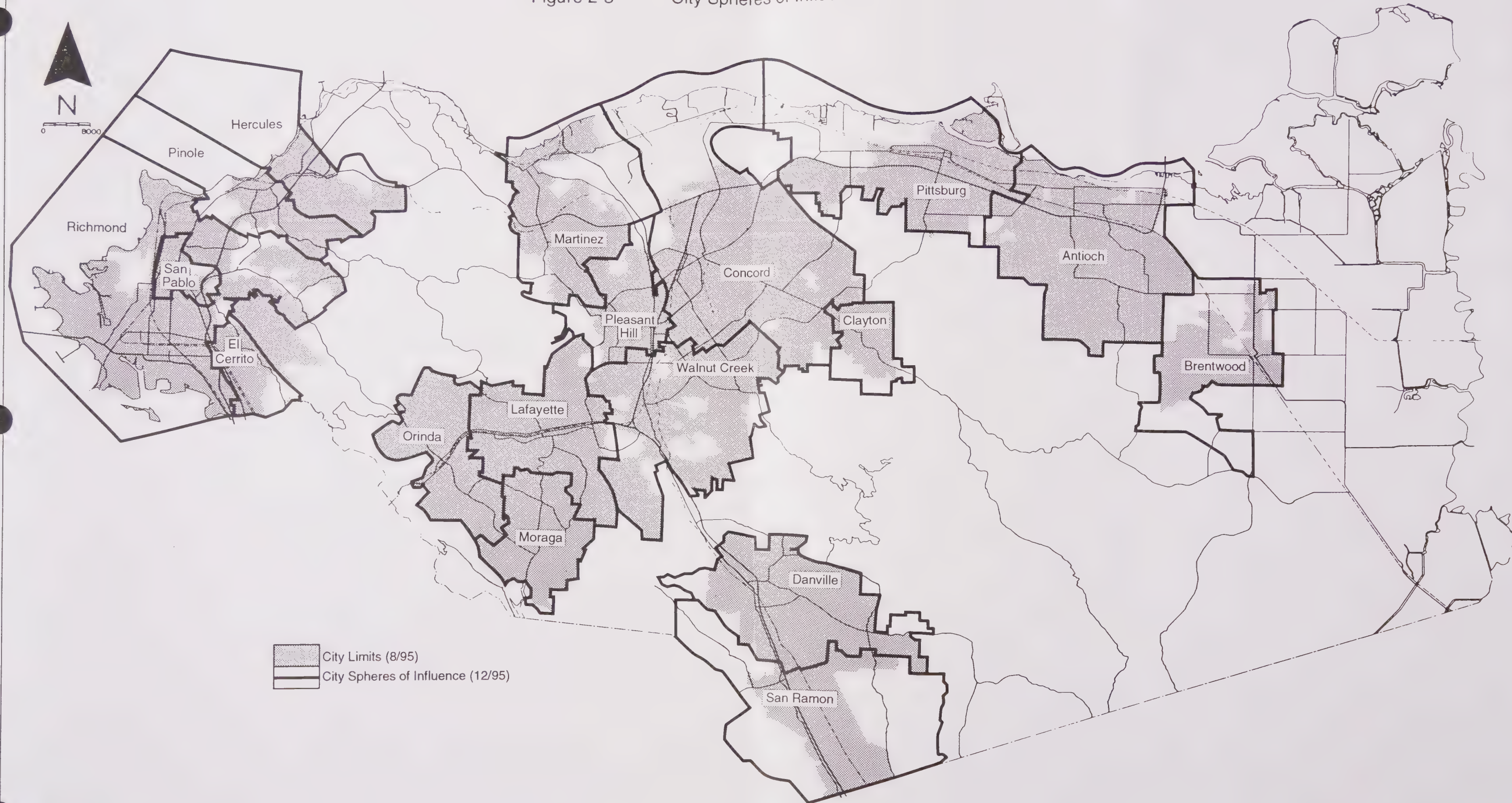




Figure 2-3 City Spheres of Influence



CONTRA COSTA COUNTY  
CALIFORNIA



### Community Development Department

The Community Development Department advises the Planning Commission, carries out technical work on the General Plan, and prepares recommendations on current planning matters, such as development applications. In many cases, the Board of Supervisors has delegated the responsibility for day-to-day current planning matters to the staff of the Community Development Department, subject to appeal to the Planning Commission and the Board of Supervisors.

## ROLE OF ADVISORY GROUPS

### Municipal Advisory Committees

Municipal Advisory Committees are located in Bay Point, Bethel Island, Byron, Discovery Bay, El Sobrante, Kensington, Knightsen, North Richmond, Oakley, and Rodeo. Duties of these groups are specified in the Government Code and by Board direction establishing the MACs.

## REGIONAL PLANNING AGENCIES

There are a number of agencies that are mandated by State law to prepare areawide plans, with which local general plans should be coordinated. Included in this category are the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC).

### Association of Bay Area Governments (ABAG)

ABAG was created in January 1961. It was founded in recognition of the fact that the physical, economic and social well-being of the entire region and of its individual communities depends on continuing areawide cooperation and coordination. It provides a forum for addressing regional problems and for formulating and implementing regional development policies. ABAG's programs are financed by membership dues, special assessments, grants, other regional agencies, and the State and federal governments. Its governing board is composed of elected city and county officials. ABAG's regional growth projections serve as the foundation of federal and State mandated regional plans and review of federally funded programs in the region. As the council of governments for the Bay Area, ABAG is sometimes required by State law to perform certain functions for the region. For example, ABAG is required to determine existing and projected housing need for the region and for each jurisdiction. In turn, local governments are required to use this information as a basis of the housing needs discussion required in the Housing Element. An explanation of the use of the ABAG projections in the County's projections is contained in the Land Use Element.



Since 1967, there has been a regional plan for the San Francisco Bay Area. Produced and maintained by ABAG, the Plan seeks to guide the economic, social, and environmental future of the nine-county region. Specifically, the Plan provides regional goals, objectives and policies on the following topics: (1) housing, (2) economic development, (3) environmental quality, (4) safety, (5) recreation, (6) transportation, and (7) health.

In addition to regional policies, the Plan also presents policies for subregions. These subregional policies determine what short-range actions are necessary to implement long-range regional policies.

The Regional Plan of Contra Costa County is divided into three subareas: (1) West County, (2) Central County, and (3) East County. There are no policies for the first subarea, while for the Central and East County there are very specific policies that ABAG and the Metropolitan Transportation Commission (MTC) will apply when evaluating important public service improvements (e.g., water, wastewater, and transportation) which need federal funding. These policies were originally developed as part of a planning study conducted by ABAG and MTC in 1984, and basically seek to coordinate the provision of public facilities with land use decisions in order to concentrate development in urban areas and to preserve natural and scenic resources.

### Metropolitan Transportation Commission (MTC)

MTC carries out comprehensive transportation planning for the nine-county, San Francisco Bay Area. MTC is required to prepare a Regional Transportation Plan and Transportation Improvement Program covering highways, selected mass transit, railroads and aviation facilities and services. All street, highway, and most mass transit projects supported by Federal and State transportation grants must be consistent with these plans and program.

### STATE AGENCIES THAT EXERCISE DIRECT LAND USE CONTROL IN CONTRA COSTA COUNTY

State agencies having direct control over land use in Contra Costa County include, without limitation, the Department of Parks and Recreation, which maintains Mt. Diablo Park and Franks Tract; the Department of Fish and Game, which regulates stream bank alteration; and Caltrans, which regulates freeway right of ways and the Bay Area Air Quality Management District which regulates air quality.

### FEDERAL AGENCIES THAT EXERCISE LAND USE CONTROL IN CONTRA COSTA COUNTY

Federal agencies having regulatory authority affecting land use and growth issues in Contra Costa County include, without limitation, the Environmental Protection Agency, the Army Corps of Engineers, and the Fish and Wildlife Service.

## 2.4 SOCIAL AND ECONOMIC SETTING

### POPULATION

Contrary to some common misconceptions, Contra Costa County was not one of the fastest growing areas in California during the 1980's. During the period 1980 through 1990, California grew by almost 6.1 million residents or by 20.5 percent. More than half (59 percent) of this population growth, or about 3.7 million new residents, occurred in the five counties of Los Angeles, San Diego, Orange, San Bernardino, and Riverside in Southern California.

Only 13.8 percent of the State's population growth during the same period was in the San Francisco Bay region, which grew by about 840,000 persons between 1980 and 1990. In 1990 the Bay Area was home to 6 million residents scattered throughout nine counties. Four of the counties in the Bay region grew very slowly during the 1980's (Marin, 3.4%, Napa, 11.7% San Mateo, 10.6% and San Francisco, 6.6%). The two largest counties (Santa Clara, 15.6% and Alameda, 15.7%) grew at a steady rate that was less than the statewide average, while the remaining two northern counties (Solano, 44.6%, and Sonoma, 29.5) experienced higher growth rates, as they changed from a rural to suburban environment.

Although Contra Costa's growth rate during the 1980 to 1990 period ( 22.4 percent) was higher than the regional average, it is interesting to note that in the East Bay, Alameda County added 15 percent more residents (173,803) in the decade than Contra Costa (147,352). The 1990 Contra Costa County population was at 803,732 as recorded in the U.S. Census. Table 2-1 shows the 1980 and 1990 demographic settings.

Between 1990 and 1995, the population of Contra Costa County continued to grow from 803,732 to 883,390, an increase of 9.9 percent (Table 2 - 1A). During the same time period housing increased by 20,000 units or by 6.4 percent.

The increase for the nine Bay Area Counties was 7.65 percent from 1990 to 1995. San Francisco had the lowest growth rate, 4.9 percent, and Sonoma and Solano Were the highest with 11.3 and 10.9 percent, respectively. The smallest numbers of growth occurred in Napa County (10,000) and the largest in Santa Clara (110,123).

## HOUSING

Residential growth in Contra Costa County added 64,252 units of new housing between 1980 and 1990, for an average of approximately 6,400 homes completed each year. But homebuilding during the 1980s has fluctuated from one year to the next, consistent with the national economic climate. Residential construction began a nosedive during the early 1980s when very high interest rates and a national recession caused housing completions to reach their lowest point in 1982. By the end of 1984, however, the local homebuilding industry had recovered and the last half of the decade saw a substantial increase in construction.

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TABLE 2-1  
DEMOGRAPHIC SUMMARY FOR CONTRA COSTA COUNTY  
( 1980, 1990, 1995)

|               | 1980    | 1990    | 1995    | 1980 to 1990 |        | 1990 to 1995 |        |
|---------------|---------|---------|---------|--------------|--------|--------------|--------|
|               |         |         |         | Growth       | Change | Growth       | Change |
| Population    | 656,380 | 803,732 | 883,390 | 147,352      | 22.4%  | 79,658       | 9.9%   |
| Housing Units | 251,918 | 316,170 | 336,438 | 64,252       | 25.5%  | 20,268       | 6.4%   |
| Jobs          | 201,237 | 305,140 | 296,700 | 103,903      | 51.6%  | -8440        | -2.7%  |

---

Sources: 1980 and 1990 U.S. Censuses; 1995 California Department of Finances's Population and Housing Units Estimates from 4/1/90 to 1/1/95; ABAG's Projections '94 for 1995 job estimate.

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The area which has absorbed the most new housing during the 1980s was the East County sub-area, (19,821) followed closely by the North Central Area (19,656), the most populous part of the County. Forty-three percent of the County's housing stock is located in the communities between Walnut Creek and Martinez along the north I-680 corridor and in Lamorinda. The housing growth measured in this area between 1980 and 1990 was significant, approximately 19,650 housing units, although the rate of growth was relatively low, only a 16.5



percent increase between 1980 and 1990 (see Table 2-2). In contrast, the growth in the San Ramon Valley within Central County in that decade was lower than the other three sub-areas of the County although the percentage of growth was 50 percent..

West County's growth experienced a 19.2 percent growth in housing units for a total of 13,734 while East County, had the largest number of new units 19,821 and the highest percentage of increases, 50.3 percent. Overall, Contra Costa County increased its housing stock by 25.5 percent during the years 1980 to 1990.

In terms of the type of housing that has been constructed in Contra Costa County, in 1980 about three quarters (73 percent) of the new housing built in the County consisted of single family homes, 7 percent was condominiums or townhouses, and 20 percent was apartment units. Over the decade 1980 - 1990 the mix of new housing shifted significantly away from homes on individual lots toward attached housing (either condos or apartments).

Between 1990 and 1995, the housing in East County increased by 15.8 percent and accounted for 42 percent of the County's housing growth. The growth rate for San Ramon Valley was 14.7 percent but accounted for 22 percent of the County's increase. The remaining 36 percent of the growth was divided between North Central County (4295) and West County (3866). (see Table 2-2A)

Of the growth in the last five years, 67 percent was single family detached homes, 8 percent was single family attached, 23 percent was apartments, and the remaining 2 percent were either 2-4 plexes or mobile homes.

TABLE 2-2  
RESIDENTIAL GROWTH IN CONTRA COSTA COUNTY BY SUB-AREA  
(1980-1990)

|           | Housing<br>Units<br>1980 | Housing<br>Units<br>1990 | Housing<br>Units<br>1995 | 1980 -<br>Growth | 1990<br>% Change | 1990 -<br>Growth | 1995<br>%Change |
|-----------|--------------------------|--------------------------|--------------------------|------------------|------------------|------------------|-----------------|
| E.County  | 39,385                   | 59,206                   | 68,566                   | 19821            | 50.3%            | 9,360            | 15.8%           |
| N.Central | 119,149                  | 138,805                  | 143,100                  | 19,656           | 16.5%            | 4,295            | 3.1%            |
| S.Ramon   | 21,956                   | 32,936                   | 37,797                   | 10,980           | 50.0%            | 4,861            | 14.7%           |
| West Co   | 71,428                   | 85,223                   | 89,089                   | 13,734           | 19.2%            | 3,8566           | 4.5%            |
| Total     | 251,918                  | 316,170                  | 338,552                  | 64,191           | 24.5%            | 22,382           | 7.1%            |

The number of new housing units is based on the years 1990, 1991, 1992, 1993, and 1994 and is the gross number built from 1/1/90 through 1/1/95. Therefore the totals differ from the data in Table 2-1.

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Sources: 1980 and 1990 U.S. Censuses and Contra Costa Community Development's Housing Completion data for 1990 - 1994.

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## EMPLOYMENT

In terms of employment growth between 1980 and 1990, employment in the County grew by approximately 51 percent (See Table 2-3). Much of the job increase was measured in the categories associated with the tremendous office and retail development along the I-680 corridor.

The area with the most job growth was the "services" sector where over 41,000 new positions were created. Within this category, the fastest growing employment areas were business services, health services, and engineering/accounting services. The second largest increase in the number of new jobs (18,448) was in retail trade.

The "transportation communications, utilities" sector increased by the largest percentage, 96.9 percent, for a total of 10,582 new jobs. Manufacturing and wholesale trade continue to be important employers as the numbers employed increased by 9,612 from 33,778 to 43,390 for a 28.5 percent increase.

During the 1990's, the "services" sector is projected to continue to increase, especially the business and health services areas. All employment areas except agriculture are expected to expand during this decade though not at such fast rates as in the 80's.

## JOBS/HOUSING RATIO

Growth policies of this General Plan will not significantly change the Countywide jobs/housing ratio. By 2010, the jobs/housing ratio is expected to reach approximately 0.76 jobs per employed resident, according to Projections '94, only a slight improvement over the ratio for the existing land use plus approved projects. In most areas of the County, recent and projected job growth will be matched by an equal amount of housing growth, so the ratio will remain roughly the same.

The jobs/housing ratio under the buildout of the General Plan will become "better" in West County as more jobs are created, and will become stabilized in Central County. But in the fastest-growing areas of Pittsburg-Antioch and the remainder of East County, so much new housing is planned that employment will continue to lag far behind. For every new job created in the Pittsburg-Antioch area, two new workers are expected to move in. However, the lopsided jobs/housing ratio in the East County communities of Oakley, Brentwood, and Discovery Bay will continue through the early years of the next century, with only one local job expected for each five new employed residents.

The projected jobs/housing ratio in eastern Contra Costa County should be improved, however, during the decades beyond the 15-year planning period of this General Plan. Based upon the market-driven construction trends in other parts of the County and region, the pattern of development in rural areas begins with the construction of suburban housing. As the influx of new residents creates the demand for new services, retail and other businesses follow the growing population base, although there can be a lag of five years or more between the construction of new housing and the creation of local jobs. This phenomenon occurred in the San Ramon Valley: the period of rapid suburbanization during the 1970s and the early 1980s has been followed by the location of numerous local and regional businesses in the valley during the 1980s.



As noted previously, this jobs/housing analysis assumes that some of the job-generating land uses in the County and Cities' General Plans (the vacant land that is planned for commercial and industrial growth) will not be developed during the next 15 years, because there is too much of this type of land (especially in East County) set aside for the market to absorb during that period.

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State of California Office of Planning and Research, General Plan Guidelines, Sacramento, June 1987, page 7.

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TABLE 2-3  
EMPLOYMENT GROWTH BY INDUSTRIAL SECTOR  
(1980-1990)

|  | <u>Change</u> |               |               |             |
|--|---------------|---------------|---------------|-------------|
|  | <u>1980</u>   | <u>1990</u>   | <u>#</u>      | <u>%</u>    |
| Agriculture/Mining                     | 3,567         | 3,810         | 243           | 6.8         |
| Mfg./Wholesale Trade                   | 33,778        | 43,390        | 9,612         | 28.5        |
| Transportation/Communication/Utilities | 10,918        | 21,500        | 10,582        | 96.9        |
| Retail Trade                           | 44,297        | 62,740        | 18,443        | 41.6        |
| Services                               | 59,844        | 101,150       | 41,306        | 69.0        |
| Government                             | 16,887        | 18,690        | 1,803         | 10.7        |
| Other                                  | <u>31,946</u> | <u>53,860</u> | <u>21,914</u> | <u>68.6</u> |
| TOTAL                                  | 201,237       | 305,140       | 103,903       | 51.6        |

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Source: ABAG Projections '94

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### 3. LAND USE ELEMENT

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## 3. LAND USE ELEMENT

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### 3.1 INTRODUCTION

State law requires every city and county to formulate and adopt a Land Use Element which, through the development of policies, plans, and standards, shows the proposed general distribution, location, density, and intensity of land uses for all parts of the jurisdiction. Section 65302(a) of the California Government Code reads:

"A Land Use Element shall designate the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land."

The State Code further stipulates that Land Use Element shall include:

"A statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the Plan. The Land Use Element shall also identify areas covered by the Plan which are subject to flooding and shall be reviewed annually with respect to such areas."

As with other elements of the General Plan, the goals, directive policies, and implementation measures of the Land Use Element are mandatory, rather than advisory. Under State law, many land use approvals made by planning commissions and boards of supervisors, including rezoning, subdivisions, development agreements, redevelopment and specific plans, park dedications, and others, must be consistent with and conform to the jurisdiction's General Plan.

This General Plan supersedes the County's prior General Plan (and each of the previously adopted elements such as the 1963 Land Use and Circulation Plan), including area general plans. The policies and maps of many prior general plan amendments and area plans have been reflected in this General Plan. The Land Use Element retains consistency with, and reflects the general plan level of goals, policies and implementation measures as prior adopted Specific Plans.



### 3.2 RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

Although the Land Use Element and its accompanying map are often thought by many to be the most important part of the General Plan, State legislation requires that the various elements comprise an integrated, internally consistent, and compatible statement of goals, policies, and programs. This means that each of the General Plan Elements are equal in legal status and that the direction given by one element may not be superior or subordinate to that of any other element.

Many of the issues that are discussed in the Land Use Element overlap issues that may be addressed in other General Plan Elements. Almost any issue dealing with the physical characteristics of land in the County will have land use implications, even if specific issues such as flooding or prime agricultural soils are not extensively addressed in the Land Use Element.

Readers of this General Plan should therefore be aware that the policies which may affect development of a specific property are not necessarily stated in only one portion of the maps and text in each element. The applicability of policies described in other elements should be taken into consideration when determining the General Plan policies for a particular area or property.

Readers are referred to the section in Chapter 1, Introduction, entitled "How to Use the General Plan" for a recommended process by which to begin determining the applicability of General Plan maps and policies to specific properties.

The Land Use Element contains the following components, suggested by the Governor's Office of Planning and Research (OPR) or required by statute:

- o inventory and distribution of existing land uses, including residential, commercial, industrial, open space and agricultural;
- o general assessment of housing needs based on projected community growth trends;
- o projections for land use and space for residential, commercial, and industrial development, based upon projections of future population and economic conditions;
- o population density standards for each land use category with residential potential;
- o land use goals and policies: County and Area Specific; and
- o programs for implementation of the land use policies.

Description and analysis of additional land use components are located in the following General Plan Elements:

- o housing analysis - a detailed discussion is contained in Chapter 6, Housing Element;
- o educational facilities: assessment of the need for and diagram of existing and proposed future school sites is located in Chapter 7, Public Facilities/Service Element;
- o public buildings and grounds: assessment of existing sites and the location of approved and pending landfill applications is in Chapter 7, Public Facilities/Service Element;
- o infrastructure, water and sewer locations and projections, goals, policies and implementation measures are discussed in Chapter 7, Public Facilities/Service Element, in addition to the Growth Management Elements in Chapter 4;
- o natural resources: land uses associated with agriculture, vegetation and wildlife, fisheries, mineral and renewable energy, oil and gas, water (bay, delta, creek), and flood zones; discussed in Chapter 8, Conservation Element;
- o open space, Urban Limit Line, 65/35 Land Preservation Standard: analysis of existing and proposed open space land use is discussed and mapped in Chapter 9, Open Space Element, including recreational, scenic, and historic/cultural resources; and
- o additional implementation programs relating to land use policies and infrastructure standards are located in Chapter 4, Growth Management Element.

The Elements are internally consistent and utilize the same population, housing, and employment projections (1990 Base Year). They support policies stated in the other elements, the land use plan maps and the accompanying text to represent a consciously selected balance among the various goals and objectives included in all of the Elements.

The balance between governing growth and preserving non-urban areas, for example, must reflect the key interplay in this General Plan between the 65/35 Land Preservation Standard, the Urban Limit Line, the Housing Element goals, and the Growth Management Element infrastructure requirements.

Additionally, the Land Use Element's relationship to the other elements of the General Plan provide that:

- o the land uses are based on the County's best currently available information concerning land use patterns;
- o actual land use and development decisions may depend upon information not currently available; and
- o the timing of development of the identified land uses will depend on satisfying the requirements of the Growth Management Element.

### 3.3 RELATIONSHIP TO SPECIFIC PLANS

#### SPECIFIC PLANS

A specific plan is a more detailed plan for a specific area within the County. Specific plans address the planning needs of a particular area, including necessary infrastructure and facilities, land uses and open space. Specific plans, while not a part of this General Plan, must be consistent with all aspects of the General Plan.

### 3.4 ORGANIZATION OF ELEMENT

The Land Use Element is organized in six parts. First, existing land uses are described. A general discussion is given of the various land use characteristics that exist in the West, Central and East sectors of the County. Second, the projected levels of growth used in the General Plan for land uses in the sectors are described.

Also discussed are the County's Urban Limit Line (ULL) and the 65/35 Land Preservation Standard in relation to the Land Use Element. (Further discussion is also provided in Section 4.0, Growth Management Element and in Section 9.0, Open Space Element.)

The final three sections of this Land Use Element enumerate the goals, policies and implementation plans of the County.

These policies, which apply only to unincorporated areas, are implemented through other general plan and area plan policies; land use controls, such as the zoning and subdivision ordinances; the requirements within the public service and facility standards; and use of the ULL.

### 3.5 EXISTING LAND USE

For a summary description of the analytical basis of the existing land uses, see Chapter 3.6, Planned Levels of Development.. The General Plan generally recognizes the land use policies of the cities' plans within the city limits with some slight modifications to fit existing land use densities into consistent plan categories.

#### GENERAL INVENTORY OF LAND USES BY SUBAREA

Ranging from urban to rural, land is used in Contra Costa County for many purposes. In the West and Central County areas, primary uses of suburban cities and towns are residential, commercial and industrial. In the East Central County and East County Area, land is used primarily for agriculture and general open space. References to land within the County or to percentages of the County refer to all of the acreage within the boundaries of the County except the water area of the County west of Stake Point.



As a whole, the County is relatively undeveloped. Although located in the San Francisco Bay Area, one of the most populated urban areas of the nation, approximately 25 percent of the County was devoted to urban uses in 1990, while the balance is used for non-urban uses such as agriculture, wetlands, parks, recreation, or general open space and other non-urban uses. Non-urban uses shall also include rural residential and agricultural structures and facilities for public purposes, whether privately or publicly funded or operated, which are necessary or desirable for the public health, safety or welfare or required by State or federal law. None of the land is used for timber harvesting. The amount of land in each major land use category in the County is summarized in Table 3-1.

## West County

### Population

In 1980 approximately 213,000 people lived in West County's urbanized areas. By 1990 the population had increased to 226,000. The largest city is Richmond and the smallest is Pinole. In the unincorporated developed areas, the largest area is El Sobrante but there are several other unincorporated areas; Bay View-Montalvin Manor, East Richmond Heights, Kensington, North Richmond, Rodeo, Crockett, and Tara Hills. The smallest geographic areas have only a few residents.

### Predominant Land Uses

West County consists of five cities (El Cerrito, Hercules, Pinole, Richmond and San Pablo) and towns, plus the unincorporated urbanized areas. This areas contains approximately 20 percent of the urbanized land in the County, and is developed with a wide variety of land uses. Most cities contain a proportional mix of principal urban land uses. However, in some cases, one use predominates. During the last two decades, urbanization has steadily moved eastward from the flat baylands into the foothills near Mt. Diablo. This elongated corridor of cities and towns is strung together by a network of major transportation routes linking the County directly to employment centers in San Francisco County.

1. Residential. Although the situation is slowly changing, Contra Costa has been comprised of "bedroom communities" populated by a commuter work force. In 1990 there were approximately 83,000 housing units in West County and 3,800 have been built between 1990 and 1995. Forty-five percent of the work force still commutes outside the County each day, primarily to San Francisco and Alameda Counties. It is not surprising, then, that the West County is predominantly developed with residential land uses.

Overall West County had a density of 3,185 persons per square mile in 1990, but some areas had much higher densities such as: San Pablo (9,731 persons/square mile), El Cerrito (6,286 persons/square mile), Tara Hills (6,399 persons/square mile), and Bay View Montalvin Manor (6,260 persons/square mile). Richmond, the largest city, had a density of 2,941 persons per square mile, somewhat lower than the average.

TABLE 3-1  
CONTRA COSTA COUNTY EXISTING LAND USE (1990)

|                          | <u>Acres<sup>1</sup></u> | <u>Percent of Total County Land</u> |
|--------------------------|--------------------------|-------------------------------------|
| Residential <sup>2</sup> | 67,910                   | 14.1                                |
| Local <sup>3</sup>       | 15,100                   | 3.1                                 |
| Basic <sup>4</sup>       | 14,800                   | 3.1                                 |
| Streets/Highways         | 24,300                   | 5.1                                 |
| Total Developed Land     | 122,100                  | 25.4                                |
| Total Acreage            | 480,000                  | 100                                 |

<sup>1</sup> Acreages are rounded to nearest 10 acres.

<sup>2</sup> Residential land uses are occupied by single- and multiple-family homes including mobile homes.

<sup>3</sup> Local Serving Employment land uses are occupied by local serving industries and businesses, including: 1) offices; 2) churches; 3) schools below the state level; 4) hospitals; 5) local and rapid transit; 6) communications and utilities; 7) restaurants; 8) banks, credit agencies, insurance brokers and agents' offices, and real estate offices; and 9) local government facilities.

<sup>4</sup> Basic employment land uses are occupied by manufacturing industries and those which export products or act as suppliers to other regional industries, including: 1) heavy industry; 2) food processing; 3) high technology manufacturing; 4) miscellaneous manufacturing; 5) long distance transportation; 6) wholesale trade; 7) finance and insurance carriers, holding and other investment companies; 8) business services; 9) schools at the state level (4-year colleges and universities) and museums; and 10) federal and State governments.



2. Commercial. Commercial uses account for approximately 10 percent of the developed land in West County. Commercial uses are found in the historic central business districts of each city and in a narrow business strip which runs the full length of I-80, West County's major north/south regional thoroughfare, and San Pablo Avenue, its major arterial roadway. Recently, major regional shopping centers have been built outside of these areas.
3. Industrial. Industrial uses also cover approximately 10 percent of developed land. Industrial uses are concentrated in a few industrial parks. The industries in these areas are predominantly light and relatively clean, and generally include warehouse; distribution facilities; assembling and processing plants; and offices.
4. Open Space. Shoreline and interior parks are interspersed in West County. Examples include San Pablo Reservoir and Briones Hills.

## Central County

### Population

A suburban population of 414,000 people lived in the Central County area in 1990. Most of this population is concentrated in large subdivided areas strung along I-680, State Route 24, and State Route 4.

### Predominant Land Uses

The suburban Central County Area is used predominantly for residential, commercial, recreation, grazing, or general open space.

1. Residential. As in the West County Area, residential development in the Central County area covers approximately 30 percent of the total developed land. There were approximately 168,000 housing units in Central County in 1990 and 4,900 were added in the last 5 years. Densities are the highest in Concord (3,780 persons/square mile) San Ramon (3,100 persons/square mile) and Walnut Creek (3,140 persons/square mile) and the lowest in Orinda (1,320 persons/square mile) and Lafayette (1,550 persons/square mile).
2. Commercial. Commercial uses account for approximately 11 percent of the developed land in the County. Commercial uses such as office parks and business strips are located on the major thoroughfares of I-680, State Route 242, and others. The major locations are in San Ramon Valley.

3. Industrial. The predominate industrial uses of Central County include Tosco and Shell Oil refineries in the northern part of Central County.
4. Open Space. Because of the Central County's hilly and large open space areas, and because of its proximity to urban areas, the State, County, and East Bay Regional Parks District (EBPRD) have open space uses.

## East County

### Population

Roughly 165,000 people lived in the East County in 1990 and approximately 198,000 in 1995. Most of the population is concentrated in the Pittsburg-Antioch area. Less than 45,000 people live in the more sparsely settled "Other East County," primarily in and around Oakley, the City of Brentwood, Byron, Knightsen, Bethel Island and Discovery Bay.

### Predominant Land Uses

The East County Area is predominantly rural and devoted to agricultural, recreational, and open space uses. Development is concentrated in collections of small urban communities.

1. Residential. In 1990 there were approximately 62,200 housing units in East County and another 9,340 added between 1990 and 1995. Most of the residential areas are in the north end of East County in the Pittsburg-Antioch area.
2. Commercial. The largest commercial area on the East County exists in and adjacent to the central business district of Pittsburg-Antioch. Other neighborhood centers are scattered throughout the subregion.
3. Industrial. There is a major complex near the Pittsburg-Antioch area consisting of heavy chemical and steel industries and some light industry. Bay Point shoreline also has some heavy and light industrial facilities. Other smaller facilities are scattered throughout the remainder of the East County.

4. Open Space. Agricultural uses, farmland, and particularly grazing land, consume most of the acreage in the East County. Crops are grown on broad coastal terraces and in narrow alluvial stream valleys, while cattle grazing and dry farming occur on the surrounding foothills. Recreation uses in East County include the Delta area and the Antioch shoreline; a recreation facility at Big Break; Black Diamond Mines and the Contra Loma Regional Park; plus others run by the East Bay Regional Park District.

### 3.6 PLANNED LEVELS OF DEVELOPMENT

#### METHODOLOGY

The analytical basis for determining the projected levels of development and land use was used consistently throughout other elements of this General Plan and is a modeling framework and database consisting of the following Elements:

- o review of relevant data sources, including: summary of City and County General Plans; 1980 and 1990 Census data; ABAG "Projections 1985, 1987, 1990 1992, 1994; various map overlays depicting various environmental characteristics; and Contra Costa Land Information System, showing assessor parcel maps with building permit information;
- o development of Traffic Zone Boundaries. This is a modeling definition, which gives planners the most highly defined use of an area's land use, employment, housing, and population patterns;
- o establishing a 1990 Base Year Benchmark. Review of data sources as listed above, in combination with the traffic zone boundaries, provided information on land parcels as built to 1990;
- o to provide for the period, 1985 to 1990, the County modeling program utilized the above sources for determining exact projects under construction, projects approved, projects proposed, and lists of vacant land and their zoning designation, for both city and County lands; and
- o projecting to the year 2005, the model assigned "default" values to all vacant land uses not covered by projects in the cities and the County, and developed a potential estimate of demand for these land uses. This provided projected population, housing, and employment generation estimates.

#### PROJECTED DEMAND FOR CONVERSION OF LAND USES

This Land Use Element and the other elements of the General Plan reaffirm many of the goals and policies of the prior County plan and plan amendments that have been adopted incrementally over the years. The General Plan will accommodate an ultimate population of slightly more than one million persons.

The Growth Management Element, in regulating the timing of development to meet various infrastructure and facility standards, could affect whether the land use conversions set forth in this Element actually occur during the horizon of this General Plan. Development contemplated by this Land Use Element, even without possible



timing delays caused by implementation of the Growth Management Element, would comply with the 65/35 Land Preservation Standard.

Table 3-2 shows the existing and project population, household and employment for the County as a whole.

#### SUBAREA DEVELOPMENT SUMMARY

The Contra Costa County Land Use Element map, at a scale of one inch to 4,000 feet, is included in the pocket at the back of this document. Note: The ability to develop under the land use designations shown on this Land Use Element Map could be affected by restrictions contained in the Growth Management Element, and many other factors.

As noted previously in Section 3.1, California planning laws advise counties to include incorporated cities within their General Plans, even though a county has land use jurisdiction only in the unincorporated areas. Thus, this General Plan covers all of Contra Costa County, and the following analysis includes the impacts of buildout of the 18 city plans.

#### RESIDENTIAL GROWTH

The Plan will, subject to compliance with growth management, the 65/35 standard, and other policies and standards, allow a significant amount of new housing development within the Urban Limit Line in the unincorporated Oakley area and smaller amounts of "in-fill" development in unincorporated Bay Point, Alamo, El Sobrante, Saranap, and other smaller unincorporated places.

##### West County

In North Richmond, hundreds of acres of vacant industrial land are expected to be developed or redeveloped during and after the planning period, now that completion of a major flood control and expressway project makes the area more attractive to investors.

##### East County

Much of the future growth in the County is planned for the Pittsburg-Antioch and other areas of East Contra Costa. Approximately 27,000 new housing units are projected in the Pittsburg-Antioch area, between 1990 and 2010. This includes 5,800 units already built between 1990 and 1995.

The remainder of East County includes the unincorporated Oakley, Bethel Island, and Discovery Bay communities, as well as the City of Brentwood. In this area, an additional 27,800 homes are projected which would result in a population increase of about 75,000 people by the year 2010. The General Plan calls for significant growth in the Oakley area south of Laurel Road, and also recognizes the growth projected by the City of Brentwood plan for area within its Sphere of Influence. However, the timing may be somewhat slower than originally expected as only 2,700 units were added in the 1990-1995 period.

### Central County

While residential growth has been very strong in the central portion of the County through the 1980s, many of the cities along the I-680 corridor are now reaching "buildout," as the last remaining lands are developed. Housing growth will continue and at least 10,000 more units will be added in the North Central area. This plan continues the policies of the Pleasant Hill BART Station Specific Plan, which allows high-density commercial and residential development in that unincorporated area.

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TABLE 3-2  
CONTRA COSTA COUNTY DEMOGRAPHIC PROJECTIONS

|                    | <u>1990</u> | <u>ABAG<br/>2010</u> | <u># Change</u> | <u>Percent<br/>Change</u> |
|--------------------|-------------|----------------------|-----------------|---------------------------|
| Population         | 803,732     | 1,104,700            | 300,968         | 37.4                      |
| Housing Units      | 316,170     | 435,917              | 119,747         | 37.9                      |
| Jobs               | 305,140     | 430,120              | 124,980         | 41.0                      |
| Employed Residents | 409,351     | 565,300              | 155,949         | 38.1                      |

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Note: These demographic projections could be affected by restrictions contained in the Growth Management Element.

Source: 1990 U.S. Census and ABAG's Projections 1994.

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### San Ramon Valley

Very large residential projects that were approved in the San Ramon Valley during the early 1980s are expected to build out through the mid-1990s. However, Dougherty Valley may add up to 11,000 new homes over a twenty year period beginning in 1995.

### COMMERCIAL/INDUSTRIAL GROWTH

In terms of future commercial and industrial growth, the General Plan is expected to result in the creation of approximately 124,980 new jobs between 1990 and 2010.

It should be noted that the job projections included in Table 3-2 assume that only a portion of the vacant lands planned for commercial or industrial uses will be developed during the planning period. The General Plan projections assume that market constraints and other factors will limit the amount of commercial and industrial development that is planned in the fast-growing East Contra Costa area. Thus, some of the job growth is not expected until after the 15-year planning period, during the second or third decades of the next century.

### THE URBAN LIMIT LINE AND LAND USES

It is imperative that the reader of this General Plan appreciate the interrelationship between the ULL, the 65/35 standard and the land use designations identified in this Land Use Element. The establishment of the ULL, community support for which was affirmed by the voters in their adoption of Measure C - 1990, is an integral feature of this Land Use Element. In general, the purpose of the ULL is twofold: (1) to ensure preservation of identified non-urban agricultural, open space and other areas by establishing a line beyond which no urban land uses can be designated during the term of the General Plan, and (2) to facilitate the enforcement of the 65/35 Land Preservation Standard.

To establish the location of the initial ULL, the County considered a number of criteria and factors. The factors for properties to be considered for location outside the ULL included: (1) land which qualifies for rating as Class I and Class II in the Soil Conservation Service Land Use Capability Classification; (2) open space, parks and other recreation areas; (3) lands with slopes in excess of 26 percent; (4) wetlands; and (5) other areas not appropriate for urban growth because of physical unsuitability for development, unstable geological conditions, inadequate water availability, the lack of appropriate infrastructure, distance from existing development, likelihood of substantial environmental damage or substantial injury to fish or wildlife or their habitat, and other similar factors. No one criterion was necessarily determinative of whether a property was located inside or outside the ULL. Where properties had characteristics that would locate them



either inside or outside the ULL, the County, based upon the best information available at the time, weighed the competing characteristics and determined the most appropriate location for the property.

During the term of the General Plan, properties that are located outside the ULL may not obtain General Plan Amendments that would redesignate them for an urban land use. In addition, those properties outside the Urban Limit Line may be subject to various agricultural and open space preservation measures identified in the other portions of the General Plan. These measures could include the following: (1) permitting owners of large acre parcels to subdivide and sell off two one-acre parcels from their property that could be developed with one residential unit on each parcel; (2) encouraging the dedication of open space and conservation easements; (3) implementing a transfer of development rights (TDR) program; (4) requiring payment of an agricultural mitigation fee for conversion of agricultural land; (5) promoting non-urban "preservation" agreements between the County and cities to prevent annexation by cities of certain appropriate properties; (6) promoting special legislation for preferential tax treatment for agricultural and open space lands; and (7) establishing an "agricultural soils trust fund" to fund possible purchase of easements or title to agricultural or open space lands. In general, the purpose of these measures is to preserve open space and agricultural lands and contribute to the continued economic viability of agricultural property. Inclusion of the measures in the General Plan does not necessarily mean that all or any one of them is endorsed by the County. Actual implementation of any of the measures will require further study and analysis and implementation through appropriate zoning measures.

Properties that are located inside the ULL would be governed by the land use designations contained in the General Plan. These properties would continue to be subject to the goals, policies and implementation measures of the General Plan as a whole. The fact that a property is located inside the ULL provides no guarantee or implication that it may be developed during the lifetime of the General Plan. Development of property within the ULL would be restricted by the limitations imposed by the County's Growth Management Program, as well as by other General Plan limitations. In addition, those properties within the ULL that do not currently have land use designations that would permit urban development would have to apply for and obtain a General Plan Amendment redesignating the property with a land use designation permitting development. Moreover, even if land is developed within the Urban Limit Line, a substantial portion of this land shall be retained for non-urban uses such as open space, parks and recreational uses. These non-urban uses within the ULL shall be considered "non-urban" in monitoring the 65/35 Land Preservation Standard. This goal shall be applied within the ULL on a Countywide basis as it may be more or less applicable to various development projects within the ULL. Therefore, the only actual effect of locating a property within

the ULL is that a General Plan Amendment may be considered for that property within the term of the General Plan, while no such application would be considered for property located outside the ULL.

#### CHANGES TO THE URBAN LIMIT LINE

There shall be no change to the ULL that would violate the 65/35 Land Preservation Standard. The ULL will only be able to be changed by a 4/5 vote of the Board of Supervisors after holding a public hearing and making one or more of the following findings based on substantial evidence in the record:

- (a) a natural or man-made disaster or public emergency has occurred which warrants the provision of housing and/or other community needs within land located outside the ULL;
- (b) an objective study has determined that the ULL is preventing the County from providing its fair share of affordable housing or regional housing as required by State law, and the Board of Supervisors finds that a change to the ULL is necessary and the only feasible means to enable the County to meet these requirements of State law;
- (c) a majority of the cities that are party to a preservation agreement and the County have approved a change to the ULL affecting all or any portion of the land covered by the preservation agreement;
- (d) A minor change to the ULL will more accurately reflect topographical characteristics or legal boundaries;
- (e) an objective study has determined that a change to the ULL is necessary or desirable to further the economic viability of the east Contra Costa County Airport, and either (i) mitigate adverse aviation related to environmental or community impacts attributable to Buchanan Field, or (ii) further the County's aviation related needs;
- (f) a change is required to conform to applicable California or federal law; or
- (g) a five (5) year periodic review of the ULL has determined, based on the criteria and factors for establishing the ULL set forth above, that new information is available (from city or County growth management studies or otherwise) or circumstances have changed, warranting a change to the ULL.

The ULL is shown on Figure 3-1. A larger scale map showing the ULL and any changes to the ULL can be obtained from the County Community Development Department. Table 3-3 shows the estimates of how the initial ULL relates to the 65/35 Land Preservation Standard in terms of acreage.

This percentage breakdown of land use translated to the acreage figures within and outside the ULL is provided in Table 3-3. The figures were developed by planimeter readings of the ULL as drawn on the Land Use Maps by the Contra Costa County Community Development Department. They demonstrate that of the 480,000 acres in the County, 168,000 acres (35 percent) could be devoted to a maximum urban use under the interplay of the 65/35 standard with the ULL program. This would require future General Plan amendments. The

calculations indicate that there are about 144,000 acres designated in the General Plan for urban use within the ULL, after deducting the existing 45,000 acres of agricultural and open space land inside the ULL.

### 65/35 Land Preservation Standard

The 65/35 Land Preservation Standard was a fundamental component of Measure C - 1990. The standard limits urban development in the County through at least the horizon of this General Plan to no more than 35 percent of the land in the County and requires that at least 65 percent of all land in the County shall be preserved for agriculture, open space, wetlands, parks and other non-urban uses. (For definitions, see Chapter 3.5) The Urban Limit Line works to enforce the 65/35 Land Preservation Standard and establish a line beyond which no urban land uses can be designated. The standard ensures that both within and outside the ULL, a maximum of not more than 35 percent urban development could occur in the County, irrespective of potential General Plan Amendments in the future. As described above, substantial portions of land to be developed within the ULL will be required for the open space, parks, recreation and other non-urban uses. The 65/35 standard operates on a Countywide basis and therefore includes urban and non-urban uses within cities as well as unincorporated areas.

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TABLE 3-3  
CONTRA COSTA COUNTY  
ESTIMATES OF URBAN LIMIT LINE  
IN RELATION TO 65/35 LAND PRESERVATION STANDARD

|    |   |                   |                |       |
|----|---|-------------------|----------------|-------|
| A. | Total County Land Area (100 percent)                    |                   | 480,000        | acres |
| B. | Minimum Non-Urban Land (65 percent)                     |                   | <u>312,000</u> | acres |
| C. | Maximum Potential Urban Land (35 percent)               |                   | 168,000        | acres |
| D. | Total Land Area in Urban Limit Line (ULL)               | 219,000           |                |       |
| E. | - Dedicated to Open Space in ULL                        | ( 29,982)         |                |       |
|    | - Dedicated to Agricultural Use in ULL                  | ( <u>45,000</u> ) |                |       |
| E. | General Plan Urban Use in ULL                           |                   | <u>144,018</u> | acres |
| F. | Maximum Potential Urban Conversion Acreage <sup>1</sup> |                   | 23,982         | acres |

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1. If GPAs were approved, this is the maximum amount of land within the initial Urban Limit Line that could be converted to urban use.

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ULL 65/35 Land Preservation Standard, Growth Management and LAFCO

In accordance with Measure C - 1990, LAFCO shall be advised by the County to (a) respect and support the County's 65/35 Preservation Standard, Urban Limit Line and growth management standards when considering requests for incorporation or annexation to cities or service districts, (b) apply the stricter growth management standards of either the County, the incorporating city or the annexing city or service district, when considering requests for incorporation or annexations of land to cities or service districts, and (c) require that unincorporated land located within the Urban Limit Line that is to be incorporated into a new city or annexed to a city be used to provide a fair share of affordable housing when and if such land is developed.

### 3.7 LAND USE DESIGNATIONS - RESIDENTIAL DENSITY AND LAND USE INTENSITY

The following section describes the 32 land use designations which are used in this General Plan and on the accompanying Land Use Element map.

The Plan includes four different single family residential designations, and seven multiple family designations. The single family categories range from a density of rural residences on one-acre lots up to 7.3 homes per net acre.

The Plans of multiple family (usually attached housing) designations range from low density townhouses, condominiums or trailer homes at a density of over seven units per net acre up to very dense apartment projects that could contain up to 100 units per acre. A multiple family designation is also included to describe congregate care projects at defined densities (senior housing with some shared facilities).

The largely commercial/industrial non-residential, job-generating land uses specified in this General Plan include nine designations:

- o four commercial (retail) designations which differentiate between regional-oriented, large-scale shopping malls and other lower-density retail centers;
- o two office designations that again differentiate between large-scale, master planned office parks (called "Business Park") and other office buildings or clusters of buildings ("Office");
- o two industrial categories that separate "heavy" from "light" manufacturing and wholesaling processes;
- o a special category applied to marina and shoreline-oriented retail uses ("Commercial Recreation");
- o a category for Airport Commercial;
- o a "Mixed Use" category applied in ten specific areas of the County;

In addition, there is a "Public and Semi-Public" category and eight categories that differentiate between types of non-urban uses, including rural, open space, parks, outdoor recreation, and agricultural-oriented uses.

Table 3-4 lists the 32 General Plan land use designations and the densities that are associated with each. The designations are closely related to the density requirements defined in the County's Zoning Ordinance, and are continuous, without gaps, across the density range. For example, the density requirements of units per net acre for the Single Family Residential - Very Low (0.2 - 0.9) and Single Family Residential - Low (1.0 - 2.9) mean that the very low designation will allow for densities ranging from 0.2 units per net acre up to but not including 1.0 units per net acre.

The densities of the General Plan's residential designations are generally defined in terms of housing units per net acre. Net acreage includes all land area used exclusively for residential purposes, and excludes streets, highways, and all other public rights-of-way. Net acreage for residential densities is assumed to constitute 75 percent of gross acreage for all uses, except for the multiple family designations, where it is assumed to comprise 80 percent. However, actual measurements used on an application may be based on analysis of the proposed development site plan.

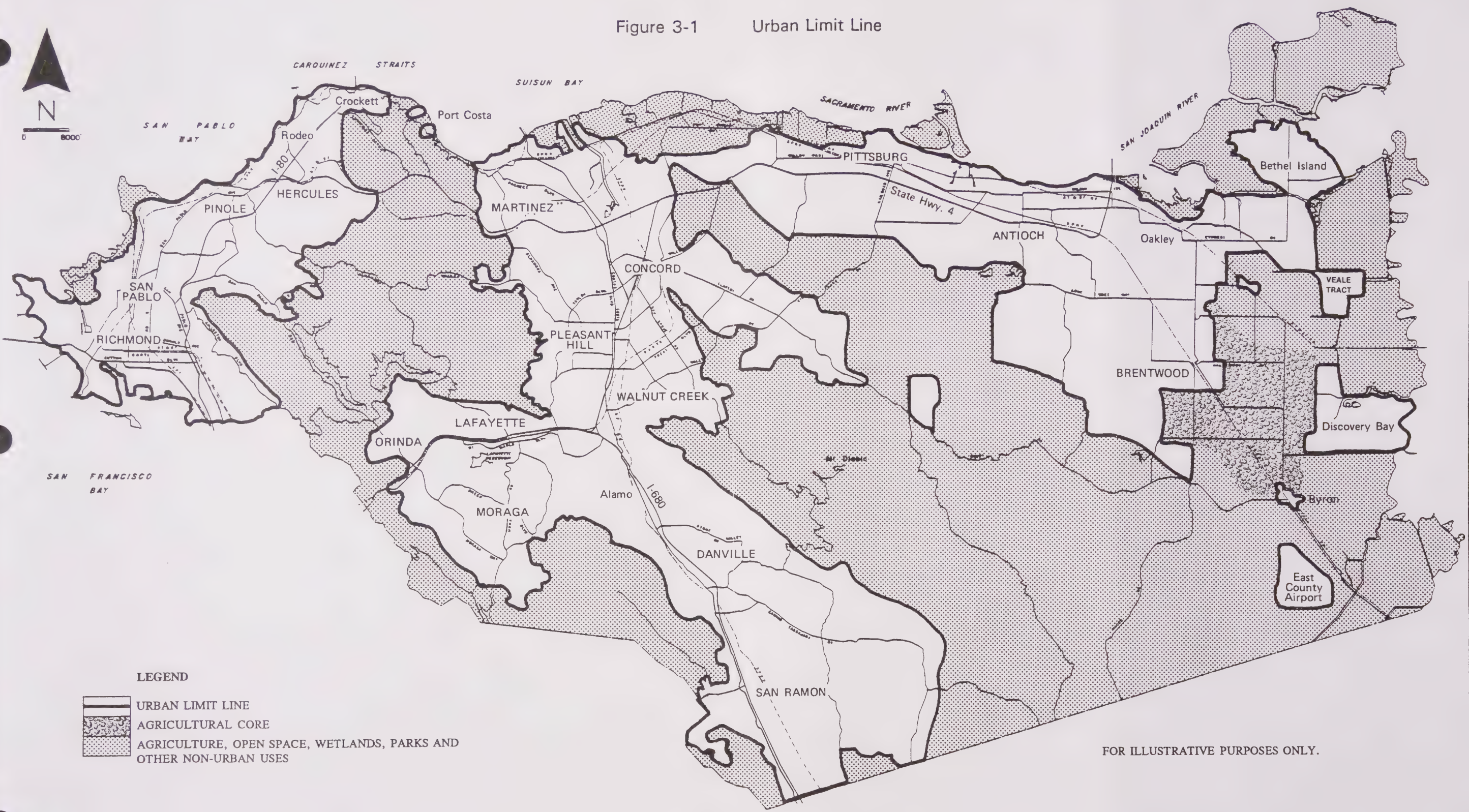
When calculating the allowed density of a parcel, readers should keep in mind that unique environmental characteristics may justify a reduced number of units or intensity of use than is normally allowed under the General Plan designation. Notwithstanding this caveat, one single-family residential unit is allowed on any existing, legally created lot designated in all residential and open space categories. Variances from the minimum lot size and dimensional requirements are provided for in the County Zoning Ordinance, in accordance with State law.

The commercial and industrial General Plan categories are defined in terms of floor area ratio (FAR). The FAR is calculated by dividing the square footage of a building by the square footage of its lot. Thus, a structure composed of 10,000 square feet constructed on a 20,000 square foot lot has a FAR of 0.5.

Table 3-5 summarizes the relationship between the land use designations used in this General Plan and the zoning districts defined in the County's current Zoning Ordinance. The table outlines which specific zoning districts are already consistent with each General Plan designation and those which might be considered consistent with the Plan category, depending on the particular use.



Figure 3-1 Urban Limit Line



**CONTRA COSTA COUNTY  
CALIFORNIA**





TABLE 3-4  
SUMMARY OF GENERAL PLAN LAND USE DESIGNATIONS

| Abbreviation<br>on Land Use Map    |                                | Units Per<br>Net Acre <sup>1</sup> |
|------------------------------------|--------------------------------|------------------------------------|
| <b>SINGLE-FAMILY RESIDENTIAL</b>   |                                |                                    |
| SV                                 | Very Low                       | 0.2 - 0.9                          |
| SL                                 | Low                            | 1.0 - 2.9                          |
| SM                                 | Medium                         | 3.0 - 4.9                          |
| SH                                 | High                           | 5.0 - 7.2                          |
| <b>MULTIPLE-FAMILY RESIDENTIAL</b> |                                |                                    |
| ML                                 | Low                            | 7.3 - 11.9                         |
| MM                                 | Medium                         | 12.0 - 20.9                        |
| MH                                 | High                           | 21.0 - 29.9                        |
| MV                                 | Very High                      | 30.0 - 44.9                        |
| MS                                 | Very High-Special              | 45.0 - 99.9                        |
| CC                                 | Congregate Care-Senior Housing | N/A                                |
| MO                                 | Mobile Home                    | 1.0 - 12.0                         |
| <b>COMMERCIAL/INDUSTRIAL</b>       |                                |                                    |
| RC                                 | Regional Commercial            | (subject to city plans)            |
| CO                                 | Commercial                     | 0.1 - 1.0                          |
| ACC                                | Airport Commercial             | .1 - 1.5                           |
| OF                                 | Office                         | 0.1 - 1.5                          |
| BP                                 | Business Park                  | 0.25 - 1.5                         |
| LI                                 | Light Industry                 | 0.25 - 0.67                        |
| HI                                 | Heavy Industry                 | 0.1 - 0.4                          |
| CR                                 | Commercial Recreation          | 0.1 - 1.0                          |
| M1, etc.                           | Mixed Use (M1, M2, M3, etc.)   | varies (see text)                  |
| LC                                 | Local Commercial               | varies (see text)                  |
| MC                                 | Marina Commercial              | varies (see text)                  |
| <b>OTHER</b>                       |                                |                                    |
| PS                                 | Public and Semi-Public         |                                    |
| LF                                 | Landfill                       |                                    |
| BA                                 | Off-Island Bonus Area          | 0.2                                |
| <b>OPEN SPACE</b>                  |                                |                                    |
| PR                                 | Parks and Recreation           |                                    |
| OS                                 | Open Space                     |                                    |
| AL                                 | Agricultural Lands             | 0.2                                |
| AC                                 | Agricultural Core              | 0.025                              |
| DR                                 | Delta Recreation               | 0.05                               |
| WA                                 | Water                          |                                    |
| WS                                 | Watershed                      |                                    |

<sup>1</sup> Net acreage includes all land area used exclusively for residential purposes, and excludes streets, highways, and all other public rights-of-way. Net acreage is assumed to constitute 75% of gross acreage for all uses, except for the Multiple Family designations, where it is assumed to comprise 80%.

<sup>2</sup> Floor area ratio is calculated by dividing building square footage by lot size.

TABLE 3-5  
CONSISTENCY BETWEEN THE GENERAL PLAN  
AND THE ZONING ORDINANCE

| <u>General Plan<br/>Land Use Designation</u> | <u>Zoning Ordinance Districts<sup>1</sup></u> |  |
|--|---|--|
|  | <u>Consistent</u>                             | <u>Could be Consistent<sup>2</sup></u> |
| Single Family Residential                    |   |  |
| -Very Low Density                            | R-40, R-65, R-100                             | P-1, all A districts                   |
| -Low Density                                 | R-15, R-20, R-40                              | P-1, all A districts                   |
| -Medium Density                              | R-10, R-15                                    | P-1, all A districts                   |
| -High Density                                | R-6, R-7, R-10,<br>D-1                        | P-1, all A districts                   |
| Multiple Family Residential                  |   |  |
| -Low Density                                 | R-6, D-1, T-1,<br>M-6, M-9                    | P-1                                    |
| -Medium Density                              | T-1, M-9, M-12,<br>M-17                       | P-1                                    |
| -High Density                                | M-17, M-29                                    | P-1                                    |
| -Very High Density                           | M-29  | P-1                                    |
| -Very High Density-Special                   | P-1   |  |
| -Congregate Care-Senior<br>Housing           | P-1   |  |
| Mobile Home                                  | T-1   | P-1                                    |
| Regional Commercial                          | C, O-1  | P-1, R-B                               |
| Commercial                                   | C, C-B, R-B, N-B,                             | P-1                                    |
| Local Commercial                             | C, R-B, N-B                                   | P-1                                    |
| Marina Commercial                            | C, R-B  | P-1                                    |
| Airport Commercial                           | P-1   | P-1                                    |
| Office                                       | O-1, A-O                                      | P-1                                    |
| Business Park                                | C-M, A-O                                      | C C, P-1                               |
| Light Industry                               | L-I   | C, P-1                                 |
| Heavy Industry                               | L-I, H-I, W-3                                 | C, P-1                                 |



General Plan  
Land Use Designation

Zoning Ordinance Districts<sup>1</sup>

|                                    | <u>Consistent</u> | <u>Could be Consistent<sup>2</sup></u>                               |
|------------------------------------|-------------------|--|
| Commercial Recreation <sup>3</sup> | C, C-B, N-B,      | R-B, P-1   |
| Mixed Use                          | P-1               | all R, all M,<br>all C and O,<br>LI, P-1, Public and Semi-<br>Public |
| Public and Semi-Public             |                   | all  |
| Parks and Recreation               | all A districts   | all  |
| Open Space                         | all A districts   | P-1  |
| Agricultural Lands                 | all A districts   | P-1  |
| Agricultural Core                  | A-40, A-80        | P-1  |
| Delta Recreation                   | A-20, A-40, A-80  | P-1  |
| Water                              |                   | P-1  |
| Watershed                          | all A districts   | P-1  |
| Landfill                           | A-2               | P-1  |

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<sup>1</sup> This inventory presumes that four antiquated zoning districts will be deleted from the County Zoning Ordinance: F-R (Forestry-Recreation); U (Unrestricted); F-1 (Water Recreational); and A-1 (Light Agriculture).

<sup>2</sup> The zoning districts listed under the "Could be Consistent" column could be found consistent with the General Plan designation under certain circumstances, depending upon the specific use that is proposed.

<sup>3</sup> A new district should be added to the Zoning Ordinance which would allow commercial uses specifically related to waterfront areas.

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For example, R-6 and R-7 zoning districts (which require a minimum lot size for new housing units of 6,000 and 7,000 square feet, respectively) are already consistent with the General Plan category of "Single-Family Residential-High Density," because the zoning falls within the density mandated by the Plan designation (5.0 to 7.2 units per net acre). The County's Planned Unit (P-1) zoning district could be considered consistent with any of the General Plan designations. When considering standards referenced in Table 3-5 and in the category definitions, the P-1 district is intended to allow flexibility in the relationship of various buildings, structures, lot sizes, and open spaces while ensuring compliance with the General Plan and County codes and standards that protect public health, safety and the general welfare of the County. The County Community Development Department shall determine plan compliance to standards found in this plan, without exceeding the total density or intensity of the project site as a whole, as specified in the General Plan.

The County Ordinance Code specifies a range of uses which are allowed by right or through the granting of a land use permit within each zoning district. A major implementation measure included in this plan calls for the County Ordinance Code to be reviewed and revised to ensure that the provisions of the code conform to the intent and spirit of the Plan. However, as a matter of County policy, the staff reports prepared for all applications shall discuss whether the application complies with the spirit and intent of this updated General Plan. In instances where consistency between allowable uses under current zoning and the General Plan cannot clearly be determined (due to scope, scale or use), use permit applications shall either be denied or directed to apply for a rezoning.

#### RESIDENTIAL USES

The General Plan map utilizes ten designations of residential use, four of which describe single family densities and seven describe multiple family densities. The abbreviation in parentheses following the name of each land use designation is a code used on the General Plan land use map to identify the areas so designated.

The following two criteria define residential land use categories:

- o housing units per net acre (excluding the area required for local streets and other public uses, which is assumed to consume approximately 25 percent of the gross single-family and 20 percent of the multi-family residential area); and
- o the population density range (persons per net acre) which is associated with the category.

The prohibitions on attached or detached structures found within the residential plan categories can be modified if found to be appropriate, to comply with the General Plan intent, and to respond to site environmental factors but only if considered through use of the Planned Unit District Zoning process.

It should be noted that the Planned Unit Development ordinance is intended to provide flexibility of site design, building massing, setbacks, height, etc. As indicated in Table 3-5 and discussed above, Planned Unit Development projects may be approved in any of the land use categories, provided that the overall density of the project is within the range specified in that category.

The residential land use designations are as follows:

a. Single-Family Residential-Very Low Density (SV).

This designation allows a maximum of up to 0.9 single family units per net acre. No maximum site area per unit is defined. With an average of 2.5 persons per household, population density would normally range between one to three persons per acre.

Primary land uses which shall be permitted in this designation include detached single family homes and accessory structures, and the keeping of a limited number of livestock, consistent with a rural lifestyle. Secondary uses generally considered to be compatible with very low density homes may be allowed, including home occupations, small residential care and childcare facilities, churches and other similar places of worship, secondary dwelling units and other uses and structures incidental to the primary uses.

b. Single-Family Residential-Low Density (SL).

This designation allows a range of 1.0 and 2.9 single family units per net acre. Sites can be as large as 43,560 square feet. Unique environmental characteristics of a parcel may justify larger lot sizes. With an average of 2.5 persons per household, population densities would normally range from about two to about 7.5 persons per acre.

Primary land uses which shall be permitted in this designation include detached single family homes and accessory structures. Secondary uses generally considered to be compatible with low density homes may be allowed, including home occupations, small residential care and childcare facilities, churches and other similar places of worship, secondary dwelling units, and other uses and structures incidental to the primary uses.

c. Single-Family Residential-Medium Density (SM).

This designation allows between 3.0 and 4.9 single family units per net acre. Sites can range up to 14,519 square feet. With an average of 2.5 persons per household, population densities would normally range from about 7.5 to about 12.5 persons per acre.

Primary and secondary land uses which shall be permitted in this category are the same as above in (b).

d. Single-Family Residential-High Density (SH).

This designation allows between 5.0 and 7.2 single family units per net acre. Sites can range up to 8,729 square feet. With an average of 2.5 to 3 persons per household, population densities would normally range from about 12.5 to about 22 persons per acre.



Primary and secondary land uses which shall be permitted in the Single Family Residential-High Density designation are the same as above in (b). In addition, in specified areas of the County with conventional zoning, attached single family units (duplexes or duets) may be allowed.

e. Multiple-Family Residential-Low Density (ML).

This designation allows between 7.3 and 11.9 multiple family units per net acre. Sites can range up to 5,999 square feet. With an average of 2.5 persons per unit, population densities would normally range between about 18.5 to about 30 persons per acre.

Primary land uses shall include attached single family residences (such as duplexes or duets), multiple family residences such as condominiums, town houses, apartments, mobile home parks, and accessory structures normally auxiliary to the primary uses. Secondary land uses which do not conflict with primary uses may be allowed, including churches, second dwelling units, home occupations, and group care and/or childcare facilities.

f. Multiple-Family Residential-Medium Density (MM).

This designation allows between 12.0 and 21.9 multiple family units per net acre. Sites can range up to 3,349 square feet. With an average of 2.5 persons per unit, population densities would normally range between about 30 to about 55 persons per acre.

g. Multiple-Family Residential-High Density (MH).

This designation allows between 22.0 and 29.9 multiple family units per net acre. Sites can range up to 1,979 square feet. With an average of 2.5 persons per unit, population densities would normally range from about 55 to about 75 persons per acre.

Primary and secondary land uses permitted in the designation are the same as in (e) above.

h. Multiple-Family Residential-Very High Density (MV).

This designation allows between 30.0 and 44.9 multiple family units per net acre. Sites can range up to 1,451 square feet. With an assumed average of 2 persons per unit, population densities would normally range from about 60 to about 90 persons per acre.

Primary land uses shall include multiple family residences such as condominiums, apartments, and accessory structures normally auxiliary to the primary uses. Secondary land uses which do not conflict with primary uses may be allowed, including second dwelling units, home occupations, and group care and/or childcare facilities.

i. Multiple-Family Residential-Very High Special Density (MS).

This designation allows between 45.0 and 99.9 multiple family units per net acre. Sites can range up to 967 square feet. With an average of 2.0 persons per unit, population densities would normally range from about 90 to about 200 persons per acre.

Primary land uses shall include multiple family residences such as condominiums, apartments, and accessory structures normally auxiliary to the primary uses. Secondary land uses which do not conflict with primary uses may be allowed, including second dwelling units, home occupations, and group care and/or childcare facilities.

j. Multiple-Family Residential-Congregate Care (CC).

The density and uses allowed in this General Plan designation are limited specifically to those senior housing with shared facility projects outlined in the text of the individual plan amendments that are adopted for these uses.

k. Mobile Homes (MO).

This designation allows between one and 12 mobile home units per net acre. Minimum site size is 3 acres for a mobile home park and minimum lot size is 2,500 square feet. With an average of 1.8 persons per unit, population densities would normally range from 1.8 to 21.6 persons per acre.

l. Off-Island Bonus Area

A bonus density is identified in the off-island area of the Bethel Island planning area east of Jersey Island Road. The base density of this area is 1 dwelling unit per 5 acres. This density shall be increased through the bonus program if the applicant participates in one of the following programs:

Recreational Projects. Residential projects which include a distinct, identifiable recreational character by including substantial recreational facilities shall be allowed a density of 1.0-2.9 units per net acre. Recreational amenities may include marinas or launching areas off the project site on Sandmound or Rock Sloughs, a lake community, a sailing/boating club on a project lake, an equestrian facility, a tennis club or golf course.

Purchase of Development Rights. The development rights for one acre increments of land in the County with an Agricultural Land designation may be purchased and dedicated to the County to increase the base density up to ½ dwelling unit per net acre. Acquiring development rights in one acre increments of land in the County with an Agricultural Core designation will increase the base density up to a maximum of 3 dwelling units per net acre. A program for acquisition of development rights shall be implemented by the Community Development Department.

## CONGREGATE CARE

This category allows for the development of clustered residential units for the location of senior citizen congregate care housing projects. While this is a specific County general category, it is adopted with unique criteria for each site it is applied to. Those special criteria are:

a. La Casa Via Congregate Care

The actual number of units for senior citizen facility will be determined upon review of development applications on the site, however, a maximum of 200 units will be considered. If senior citizen housing is not constructed, the property will be limited to a single family residential unit per net acre as allowed by the pre-existing General Plan on the site. An expansion of the EBRPD's trail, which goes parallel to Covey Court, will be required as part of this approval. Additional right-of-way and trail development is a responsibility of the property. Provision of a bike trail along La Casa Via is also required.

## b. Alamo Villa

The actual number of units to be allowed on this site will be determined upon review of the development applications on the site. If senior housing is not constructed on the site, the property will be limited to 1 to 3 single family residential units per net acre.

A downtown park will be created within this amendment area. It will serve both the general public and the residents of the adjacent senior housing project and will be integrated into the design scheme for applications received under this plan amendment. The exact size, location along Danville Boulevard, responsibility for capital, operation and maintenance costs, and required amenities will be resolved at the time of application review.

Development occurring under this amendment will need to be reviewed to ensure that extensive landscaping buffers are maintained and enhanced between the senior project and adjacent single family residences.

The historic structures which exist on site should be either integrated into the project design or moved to other locations within the Alamo community if feasible.

## c. Perma-Bilt Congregate Care

The site has been developed as a congregate care facility in the Walnut Creek area and was operational in 1991.

## COMMERCIAL/OFFICE/INDUSTRIAL USES

This General Plan designates eight non-residential, job-generating land use activities. The designations are described in terms of uses allowed; the maximum coverage that a building may occupy on the parcel; the maximum floor area ratio; and the average number of employees per gross acre that could be expected.

## a. Commercial (CO).

This designation allows for a broad range of commercial uses typically found in smaller scale neighborhood, community and thoroughfare commercial districts, including retail and personal service facilities, limited office and financial uses. The following standards shall apply to uses in this designation:

|     |                                   |               |
|-----|-----------------------------------|---------------|
| (1) | maximum site coverage:            | 40 percent    |
| (2) | maximum building height:          | 35 feet       |
| (3) | maximum floor area ratio:         | 1.0           |
| (4) | average employees per gross acre: | 160 employees |

## b. Regional Commercial (RC).

This designation allows large centers of commercial land use concentrations, including regional shopping malls and similar uses, with retail, personal service, financial and associated facilities, and



hospitals. There are no regional commercial areas within the unincorporated County. The standards which apply to these areas are outlined in the respective city General Plans and zoning ordinances:

- |     |                                   |                         |
|-----|-----------------------------------|-------------------------|
| (1) | maximum site coverage:            | (subject to city plans) |
| (2) | maximum building height:          | (subject to city plans) |
| (3) | maximum floor area ratio:         | (subject to city plans) |
| (4) | average employees per gross acre: | (subject to city plans) |

c. Local Commercial (LC)

The local Commercial designation in the Bethel Island Area allows for the continued maintenance of the existing commercial core along Bethel Island Road, at both ends of the bridge. Land uses under this designation shall support existing businesses and further the variety of services and retail products available to the residents and visitors. Limited local commercial may be considered in other portions of the off-island area if incorporated into a residential community.

d. Marina Commercial (MC)

Land uses with a Marina Commercial designation in the Bethel Island Area shall be tied directly to water-oriented activities such as boat sales, repairs, storage, fishing supplies and water skiing.

e. Commercial Recreation (CR)

This designation allows a range of privately operated recreational uses of a commercial character, including marinas and similar facilities, campgrounds, golf courses, outdoor sports and athletic complexes. The following standards apply to these areas:

- |     |                                   |              |
|-----|-----------------------------------|--------------|
| (1) | maximum site coverage:            | 40 percent   |
| (2) | maximum building height:          | 35 feet      |
| (3) | maximum floor area ratio:         | 1.0          |
| (4) | average employees per gross acre: | 15 employees |

f. Airport Commercial (ACC)

This category reflects commercial uses that could stand separate from the airport, but serve to support the airport function. The Sheraton Inn and adjacent lands are found within this designation.

- |     |                                   |              |
|-----|-----------------------------------|--------------|
| (1) | maximum site coverage:            | 30 percent   |
| (2) | maximum building height:          | 40 feet      |
| (3) | maximum floor area ratio:         | 0.67         |
| (4) | average employees per gross acre: | 45 employees |

## g. Office (OF)

This designation allows office facilities of an administrative character including branch and head offices, multi-tenant structures and similar uses, and medical offices. The following standards apply:

- |     |                                   |               |
|-----|-----------------------------------|---------------|
| (1) | maximum site coverage:            | 40 percent    |
| (2) | maximum building height:          | 50 feet       |
| (3) | maximum floor area ratio:         | 1.5           |
| (4) | average employees per gross acre: | 100 employees |

## h. Business Park (BP)

This designation allows a mix of commercial, office, and light industrial uses which, by the high quality of their development and the nature of their operations, demonstrate compatibility with adjacent commercial and residential uses. In addition, smaller commercial establishments which serve on-site employees such as business services and local-serving retail uses are allowed. Adherence to landscaping, buffering and design standards provide the means for achieving a high level of amenity for employees and neighboring uses. The following standards apply:

- |     |                                   |               |
|-----|-----------------------------------|---------------|
| (1) | maximum site coverage:            | 40 percent    |
| (2) | maximum building height:          | 60 feet       |
| (3) | maximum floor area ratio:         | 1.5           |
| (4) | average employees per gross acre: | 100 employees |

## i. Light Industry (LI)

This designation allows light industrial activities such as processing, packaging, machinery repair, fabricating, distribution, warehousing and storage, research and development, and similar uses which emit only limited amounts of smoke, noise, light, or pollutants. The following standards apply:

- |     |                                   |              |
|-----|-----------------------------------|--------------|
| (1) | maximum site coverage:            | 50 percent   |
| (2) | maximum building height:          | 50 feet      |
| (3) | maximum floor area ratio:         | 0.67         |
| (4) | average employees per gross acre: | 60 employees |

## j. Heavy Industry (HI)

This designation allows activities requiring large areas of land with convenient truck and rail access. These uses are typically not compatible with residential uses in close proximity and the operations conducted may be characterized by noise or other conditions requiring spatial separation. Uses may include metal working, chemical or petroleum product processing and refining, heavy equipment operation and similar activities. Light industrial land uses will be allowed within lands designated Heavy Industrial and they can be developed according to light industrial definition and standards found in that designation. The following standards apply:

|     |                                   |              |
|-----|-----------------------------------|--------------|
| (1) | maximum site coverage:            | 30 percent   |
| (2) | maximum floor area ratio:         | 0.67         |
| (3) | average employees per gross acre: | 45 employees |

## MIXED USES

This General Plan utilizes a "Mixed Use" land use designation (abbreviated "M1", "M2", etc.) in the following unincorporated locations: along Parker Avenue in Rodeo (designated on the General Plan Map as M1); at the Pleasant Hill BART station (M3); along the Willow Pass Road Corridor in Bay Point (M5); Cypress Corridor area between Oakley and Bethel Island (M8); Laurel Road (M9); Dougherty Valley Village Center (M10) and within a number of cities (e.g. the mixed use designation in downtown Pleasant Hill (M2)). The Mixed Use designations employed in the unincorporated areas are described below.

The purpose of the mixed use designation is to provide for the integration in a single project of both residential and commercial/office uses. In the mixed use category housing is specifically permitted but not required.

### a. Mixed Use-Downtown Rodeo (M1).

The Parker Avenue Mixed Use district in Rodeo (M1 on the Land Use map) represents the revival of a once common concept: the placement of residential units over street level businesses. This designation applies to properties along a portion of Parker Avenue, and behind them along the flood control channel. Due to the limited frontage dimensions of existing parcels, it will be necessary to consolidate properties to create at least 100 feet of continuous frontage on Parker Avenue as a prerequisite for retail or office uses in this area. Without such consolidation, parcels will be restricted to multiple family residential uses in the high density residential ranges.

Additional development guidelines that are to be applied to projects proposed in this area are included under the "Policies for the Rodeo Area" in Chapter IV.

### b. Mixed Use-Pleasant Hill Redevelopment Area (M2).

This use is described in plans adopted by the City of Pleasant Hill.

### c. Mixed Use-Pleasant Hill BART (M3).

The Pleasant Hill BART station Mixed Use District (M3 on the Land Use map) applies to three sub-areas defined by the Pleasant Hill BART Station Specific Plan. The mixed use areas are located generally south of Las Juntas Way.

Specific development guidelines for these areas are included in the "Policies for the Pleasant Hill BART Station Area" section in Chapter 4.



## d. Mixed Use-Walnut Creek Core Area (M4).

This use is described in plans adopted by the City of Walnut Creek.

## e. Mixed Use-Bay Point (M5).

The Willow Pass Road Mixed Use Corridor designation ("M5" on the Land Use map) has been applied to many properties on either side of Willow Pass Road. A range of neighborhood shopping, residential, and office uses are permitted in this designation to stimulate the upgrading and redevelopment of properties. Development guidelines that are to be applied to projects proposed in this area are included under the "Policies for the Bay Point Area" section of Chapter 4.

## f. Mixed Use-Downtown Clayton (M6).

This use is described in plans adopted by the City of Clayton.

## g. Mixed Use-Wood Ranch (M7).

The mixed use area on the former Wood Ranch property in the Sycamore Valley, within the Town of Danville, is described in plans adopted by that city.

## h. Mixed Use-Oakley Community Center (M8).

The Oakley Community Center Mixed Use District comprises three properties totaling 1,539 acres located north of Cypress Road, east of Marsh Creek, and west of Jersey Island Road commonly referred to as the Cypress Corridor. The purpose of this mixed use designation is to provide for the integrated development of these three properties through a comprehensive planning process which will be completed prior to actual development of any of the three properties. This planning process will have as its focal point a community center complex, including a large community park, for either the incorporated or unincorporated community of Oakley. Given the unique physical characteristics of the site and its intended function as a community center for Oakley, the planning flexibility provided by this mixed use designation is necessary. All land use categories may include open space areas for active and passive recreation, wetland preservation, water canals, and similar open space uses. Water-related uses will largely occur north of the Contra Costa Canal; Commercial and Office uses will largely occur south of the Contra Costa Canal; and Single Family and Multi-Family uses will occur on both sides of the Contra Costa Canal. The land uses within this mixed use plan are anticipated to include:

## RANGE OF GROSS ACREAGES OF PROPOSED LAND USE FOR CYPRESS CORRIDOR

| Land Use Category                      | Low   | High  |
|--|-------|-------|
| Single Family Residential (SL, SM, SH) | 1,035 | 1,330 |
| Multi-Family Residential (ML, MM, MH)  | 100   | 150   |
| Commercial (CO)                        | 15    | 20    |
| Office (OF)                            | 30    | 40    |
| Commercial Recreation (CR)             | 20    | 30    |
| Parks and Recreation (PR)              | 100   | 150   |
| Public and Semi-Public (PS)            | 25    | 35    |

i. Mixed Use - Laurel Road (M-9)

This site is located on the south side of Laurel Road at the ATSF railroad tracks. The site will serve as a transition from the lower density single-family residential use to traditional commercial uses.

j. "Mixed Use - Dougherty Valley Village Center (M-10).

This Mixed-Use designation identifies approximately 48 acres for the Village Center located at the confluence of the two main branches of Alamo Creek. This Mixed-Use category will permit a combination of high density residential, retail and office uses, civic uses, parks, playas, and open space. Within the Village Center portions of the project densities up to 40 units per net acre will be allowed. Up to 680,000 square feet of retail/office/civic uses could be allowed in the Village Center.

### PUBLIC, SEMI-PUBLIC, LANDFILL AND OPEN SPACE USES

A total of eight land use designations have been defined for these uses. These include open space, agricultural, and recreational uses, as well as public/semi-public uses such as schools; public offices; highways and major flood control rights-of-way; and railroads. These use designations generally comprise non-urban uses under the 65/35 Land Preservation Standard.

a. Public and Semi-Public.

As the title implies, the "Public and Semi-Public" designation includes properties owned by public governmental agencies such as libraries, fire stations, schools, etc. This designation is also applied to public transportation corridors (freeways, highways, and BART), as well as privately owned transportation and utility corridors such as railroads, PG&E lines, and pipelines. The largest properties in this category are those of the U.S. Naval Weapons Station in Concord and Port Chicago.

A wide variety of public and private uses are allowed by this General Plan category. However, the construction of private residences or private commercial uses, and the subdivision of land, are not considered compatible with this designation.

b. Agricultural Lands.

This land use designation includes most of the privately owned rural lands in the County, excluding private lands that are composed of prime soils or lands that are located in or near the Delta. Most of these lands are in hilly portions of the County and are used for grazing livestock, or dry grain farming. The category also includes non-prime agricultural lands in flat East County areas, such as outside Oakley, which are planted in orchards. Some of the Agricultural Lands east of Oakley and Byron are included in the 100-year flood plain, as mapped by the Federal Emergency Management Agency (FEMA).

The purpose of the Agricultural Lands designation is to preserve and protect lands capable of and generally used for the production of food, fiber, and plant materials. The title is intended to be descriptive of the predominant land-extensive agricultural uses that take place in these areas, but the land use title or description shall not be used to exclude or limit other types of agricultural, open space

or non-urban uses such as landfills, except as noted below in the descriptions of "Agricultural Core," "Delta Recreation and Resources," "Watershed," "Parks and Recreation," and "Open Space." The maximum allowable density in this category is one dwelling unit per 5 acres.

The uses that are allowed in the Agricultural Lands designation include all land-dependent and non-land dependent agricultural production and related activities. In addition, the following uses may be allowed by issuance of a land use permit, which shall include conditions of approval that mitigate the impacts of the use upon nearby agricultural operations through the establishment of buffer areas and other techniques:

- o facilities for processing agricultural products produced in the County such as dairies, rendering plants, and feed mills;
- o commercial agricultural support services which are ancillary to the agricultural use of a parcel, such as veterinarians, feed stores, and equipment repair and welding; and
- o small-scale visitor serving uses including small tasting rooms, stands for the sale of products grown or processed on the property, guest or "dude" ranches, horse training and boarding ranches, improved campgrounds, and "bed and breakfast" inns of five or fewer bedrooms which are on lots of 20 acres or more, extensive recreational facilities and private retreats.

The following standards shall apply to all uses allowed in the Agricultural Lands designation:

- (1) Any subdivision of lands shall include conditions of approval which conform with the requirements of the "Ranchette Policy," which is outlined in the "Agricultural Resources" section of the Conservation Element (Chapter 8); and
- (2) Residential and non-residential uses proposed in areas of special flood hazards, as shown on FEMA maps, shall conform to the requirements of the County Floodplain Management Ordinance (County Ord. #87-45) and the further requirements outlined in the "Delta Recreation" section (d) (5) below.

c. **Agricultural Core.**

This designation applies to agricultural lands that are composed primarily of prime (Class I or II) soils in the Soil Conservation Service Land Use Capability Classifications, which are considered the very best soils for farming a wide variety of crops. Lands designated as Agricultural Core are located in East County outside the ULL to the east, south, and west of the City of Brentwood. Much of the land in this designation is under active cultivation of intensive row crops, such as tomatoes and other vegetables. A portion of the Agricultural Core lands are included within the 100-year flood zone, as identified by the U.S. Federal Emergency Management Agency (FEMA).

The purpose of the Agricultural Core designation is to preserve and protect the farmlands of the County which are the most capable of, and generally used for, the production of food, fiber, and plant materials. Agricultural operations in the Agricultural Core shall, in accordance with Measure C - 1990, be protected by requiring a higher minimum parcel size than the Agricultural Lands designation, to attempt to maintain economically viable, commercial agricultural units. The creation of small uneconomical units will be discouraged by land use controls and by specifically discouraging minor subdivisions and "ranchette" housing development.



The uses that are allowed in the Agricultural Core designation are the same as those allowed, without the issuance of a land use permit, in the Agricultural Lands designation, specified above. However, none of the uses described as conditional uses in the Agricultural lands designation are considered appropriate in the Agricultural Core designation. This Plan discourages the placement of public roadways or new utility corridors which would adversely affect the viability of the Agricultural Core if economically feasible alternatives exist.

Residential uses are allowed in the Agricultural Core according to the following standards (in accordance with Measure C - 1990):

- (1) the maximum permitted residential density shall be one unit per 40 acres;
- (2) subdivision of land which would create a cluster of "ranchette" housing is inconsistent with this plan; and
- (3) residential and non-residential uses proposed in areas of special flood hazards, as shown on FEMA maps, shall conform to the requirements of the County Floodplain Management Ordinance (County Ord. #87-45) and the further requirements outlined in the "Delta Recreation and Resources" section (d) (5) below.

d. Delta Recreation and Resources.

This land use designation encompasses the islands and adjacent lowlands of the San Joaquin-Sacramento Delta, excluding Bethel Island and the community of Discovery Bay which have separate land use designations on the Land Use Map. Most of the lands designated Delta Recreation and Resources are within the 100-year flood plain mapped by FEMA, which means that the area is subjected to periodic flooding. Many of the Delta islands, and the tracts adjacent to the Delta, are currently in agricultural production of dry grains and other special crops suited to the soils and climate, such as asparagus. There are limited public water or sewer services currently available to the area.

The serious flooding danger in the area is due to the possibility that bay and river waters will overtop the existing levees during periods of storms or other high water, as well as the possibility that portions of the earthen levees may fail entirely during storms or earthquakes, resulting in the inundation of whole islands or tracts. The flooding danger is exacerbated by the effects of subsidence (sinking of Delta islands) and the rising of global sea waters caused by the "greenhouse effect." In recent years, during 1973, 1980, 1983, and 1986 one or more Delta island levees failed or were overtopped, and some of these were summer breaks that did not occur at a time of high storm runoff. Some islands in the Delta have been flooded two or three times since 1980.

Additionally, lands within this designation include lands with valuable wildlife habitat, some of which support species of ecological value to the County and the State. These areas are an important component of the Pacific Flyway, a major waterfowl migration route in North America.

Public preservation of portions of these resources is encouraged by this plan. Private utilization of the resources for hunting and fishing is appropriate, if the activities do not harm the long-term resource value of the Delta.

Due to their proximity to the Delta waterways, these lands have potential recreational value. The purpose of the Delta Recreation and Resources designation is to balance the recreational opportunities

of the area against the need to allow only low intensity uses which will not subject large numbers of residents or visitors to flood dangers. Agriculture and wildlife habitat is to be considered the most appropriate uses in the area, with limited recreation uses allowed which do not conflict with the predominant agricultural and habitat uses.

The primary uses that are allowed in the Delta Recreation and Resources designation are those agricultural production and processing activities allowed in the Agricultural Lands designation, listed in section (b) above.

Additional uses that may be allowed through the issuance of a land use permit include: marinas, shooting ranges, duck and other hunting clubs, campgrounds, and other outdoor recreation complexes.

Conditional uses allowed in the Delta Recreation and Resources designation shall be limited to those low- to medium-intensity establishments that do not rely on urban levels of service or infrastructure, i.e., a public water or sewer system, and which will not draw large concentrations of people to flood-prone areas. Uses allowed within areas designated for Delta Recreation and Resources shall be subject to the following standards:

- (1) the maximum permitted residential density shall be one unit per twenty acres;
- (2) all recreational uses shall be accessible by a publicly maintained road;
- (3) any subdivision of lands shall include conditions of approval which conform with the requirements of the "Ranchette Policy," which is outlined in the "Agricultural Resources" section of the Conservation Element;
- (4) development shall not be permitted on lands designated by FEMA as flood-prone until a risk assessment and other technical studies have been prepared and have shown that the risk is acceptable;
- (5) all approved entitlements (land use permits, tentative, final, and parcel maps, development plan permits, and variances) and ministerial permits (building and grading permits) shall conform to the requirements of the Floodplain Management Ordinance (County Ord. #87-45), which are incorporated into this General Plan by reference;
- (6) all entitlements shall include conditions of approval which require that a "flood-prone area" notification statement be included in the deeds for all affected properties. The same notification statement shall be recorded on the face of all subdivision maps, along with the specific elevations that will be required of all new building pads and habitable floors; and
- (7) dock and marina standards as described in policy 3-47.



## e. Watershed.

Areas designated "Watershed" in this General Plan include much of land owned by the two major water suppliers in the County, the East Bay Municipal Utility District (EBMUD) and the Contra Costa Water District (CCWD). EBMUD property designated as "Watershed" surrounds the Lafayette, Briones, San Pablo, and Upper San Leandro Reservoirs (which are in a separate "Water" designation). Other EBMUD lands designated in this designation are located north and south of the Caldecott Tunnel and along Pinole Valley Road. CCWD lands placed in the "Watershed" designation category include properties acquired for the proposed Los Vaqueros reservoir in the southeastern portion of the County.

In order to safeguard the public water supplies stored in the reservoirs, only a very limited number of uses are allowed in "Watershed" areas. These uses include extensive agriculture, primarily grazing of livestock; intensive agriculture that does not rely upon pesticides or other chemical fertilizers, such as Christmas tree farming; passive, low intensity recreational uses such as hiking and biking, as well as small-scale commercial uses that support picnicking, boating, and fishing activities on the adjacent reservoirs.

## f. Open Space.

This General Plan designation includes publicly owned, open space lands which are not designated as "Public and Semi-Public," "Watershed," or "Parks and Recreation." Lands designated "Open Space" include, without limitation, wetlands and tidelands and other areas of significant ecological resources, or geologic hazards.

The "Open Space" designation also includes privately owned properties for which future development rights have been deeded to a public or private agency. For example, significant open space areas within planned unit developments identified as being owned and maintained by a homeowners association fall under this designation. Also included are the steep, unbuildable portions of approved subdivisions which may be deeded to agencies such as the, EBRPD but which have not been developed as park facilities. Other privately owned lands have been designated as "Open Space" consistent with adopted city General Plans.

The most appropriate uses in "Open Space" areas involve resource management, such as maintaining critical marsh and other endangered habitats or establishing "safety zones" around identified geologic hazards. Other appropriate uses are low intensity, private recreation for nearby residents. The construction of permanent structures, excluding a single-family residence on an existing legally established lot, not oriented towards recreation or resource conservation, is inconsistent with this open space designation. One single family residence on an existing legal lot is consistent with this designation.

## g. Parks and Recreation.

The "Parks and Recreation" designation includes publicly-owned city, district, County and regional parks facilities, as well as golf courses, whether publicly or privately owned.

Appropriate uses in the designation are passive and active recreation- oriented activities, and ancillary commercial uses such as snack bars, and restaurants. The construction of new privately owned



residences or commercial uses, and the subdivision of land, is inconsistent with this General Plan designation.

h. Water.

This designation is applied to approximately 68 square miles of water in the San Francisco-San Pablo Bay and Sacramento-San Joaquin River estuary system which is within the County. The designation is also applied to all large inland bodies of water such as reservoirs.

Uses allowed in the "Water" designation area include transport facilities associated with adjacent heavy industrial plants, such as ports and wharves; and water-oriented recreation uses such as boating and fishing.

The construction of new residences or commercial uses and the subdivision of land is inconsistent with this General Plan designation.

i. Landfill

"LF" designates sites for public or private landfills. Landfills and related uses are allowed in LF areas. A use permit shall be required to develop a landfill. Uses in any buffer areas within an LF designation shall be limited to landfill-related uses, open space uses, and agricultural uses.

Prior to landfill development, open space or agricultural uses allowed by the AL designation are allowed in LF areas. After a landfill is closed, these AL uses, plus monitoring and other necessary or desirable post-closure activities, are allowed.

To satisfy the requirements for building intensity and population density standards, the following provisions apply to areas designated for landfills: (a) one landfill shall be allowed within each LF area; (b) no new residential units shall be allowed; and (c) accessory buildings shall be limited to a maximum of three stories in height (excluding towers or antennae relating to landfill operation). These provisions are maximums, and the actual height of any landfill facilities shall be set forth in the use permit and accompanying plans. The specific dimensions of each landfill will depend upon the features of the designated site, and must be determined in considering a use permit for the landfill.

The LF designation also implements Section F(2) of the Board of Supervisors' 65/35 Land Preservation Plan, approved by the County voters as Measure C in November 1990. Section F(2) provides that facilities for public purposes are a non-urban use allowed outside the Urban Limit Line.

### 3.8 LAND USE GOALS, POLICIES AND IMPLEMENTATION MEASURES

#### GOALS

The following broad goals form the basis from which the County's land use policies and implementation measures, presented later in this chapter, are derived. In the following goals, policies and implementation measures, note that when the word "urban" is employed (as in the phrase "urban development" and "urban uses"), the broad definition of the word is intended. This broad definition is the definition of Measure C - -

1990 used to distinguish between the maximum of 35 percent of the County land that can be used for urban development and the 65 percent minimum of land in the County that must be preserved for agriculture, open space, wetlands, parks and other non-urban purposes. This broad definition of "urban" is in contrast to the more restrictive use of the word "urban" in the Growth Management Program, which is included in Chapter 4. These more restrictive definitions were used in Measure C - 1988 solely for information and guidance in applying traffic service standards for growth management.

- 3-A. To coordinate land use with circulation, development of other infrastructure facilities, and protection of agriculture and open space, and to allow growth and the maintenance of the County's quality of life. In such an environment all residential, commercial, industrial, recreational and agricultural activities may take place in safety, harmony, and to mutual advantage.
- 3-B. To provide opportunities for increasing the participation of Contra Costa County in the economic and cultural growth of the region, and to contribute to, as well as benefit from, the continued growth in importance of the Bay Region and the State of California.
- 3-C. To encourage aesthetically and functionally compatible development which reinforces the physical character and desired images of the County.
- 3-D. To provide for a range and distribution of land uses that serve all social and economic segments of the County and its subregions.
- 3-E. To recognize and support existing land use densities in most communities, while encouraging higher densities in appropriate areas, such as near major transportation hubs and job centers.
- 3-F. To permit urban development only in locations of the County within identified outer boundaries of urban development where public service delivery systems that meet applicable performance standards are provided or committed.
- 3-G. To discourage development on vacant rural lands outside of planned urban areas which is not related to agriculture, mineral extraction, wind energy or other appropriate rural uses; discourage subdivision down to minimum parcel size of rural lands that are within, or accessible only through, geologically unstable areas; and to protect open hillsides and significant ridgelines.
- 3-H. To adopt and implement an innovative Countywide Growth Management Program which effectively links land use policy with transportation and other infrastructure improvements.
- 3-I. To coordinate effectively the land use policies of the County General Plan with those plans adopted by the cities and special service districts.
- 3-J. To encourage a development pattern that promotes the individuality and unique character of each community in the County.
- 3-K. To develop a balance between job availability and housing availability with consideration given to wage levels, commute distance and housing affordability. The individual characteristics of the several subregions of the County and their interaction with other regions shall be considered when establishing criteria for delivering that balance.

- 3-L. To safeguard the County's obligations to provide its fair share of safe, decent and affordable housing.
- 3-M. Protect and promote the economic viability of agricultural land.
- 3-N. To coordinate effectively the policies of the Land Use Element with appropriate Local Agency Formation Commission (LAFCO) determinations.

## POLICIES

### Countywide

The following are broad, Countywide policies which apply to all properties. More detailed development policies for specific areas in the County are found in the "Local Plan Policies" section at the end of this chapter.

#### Jobs/Housing Balance

- 3-1. Housing infill shall be supported and stimulated where the jobs/housing ratio shows an overabundance of jobs to housing.
- 3-2. Job infill shall be supported and stimulated where the jobs/housing ratio shows an overabundance of housing to jobs.
- 3-3. As feasible, areas experiencing rapid urban growth shall be developed so as to provide a balance of new residential and employment opportunities.
- 3-4. Financing mechanisms shall be developed which spread the costs of facilitating jobs/housing balance between existing and new development.

#### Growth Management, 65/35 Land Plan, and Urban Limit Line

- 3-5. New development within unincorporated areas of the County may be approved, providing growth management standards and criteria are met or can be assured of being met prior to the issuance of building permits in accordance with the growth management.
- 3-6. Development of all urban uses shall be coordinated with provision of essential Community services or facilities including, but not limited to, roads, law enforcement and fire protection services, schools, parks, sanitary facilities, water and flood control.
- 3-7. The location, timing and extent of growth shall be guided through capital improvements programming and financing (i.e., a capital improvement program, assessment districts, impact fees, and developer contributions) to prevent infrastructure, facility and service deficiencies.
- 3-8. Infilling of already developed areas shall be encouraged. Proposals that would prematurely extend development into areas lacking requisite services, facilities and infrastructure shall be opposed. In accommodating new development, preference shall generally be given to vacant or under-used sites



within urbanized areas, which have necessary utilities installed with available remaining capacity, before undeveloped suburban lands are utilized.

- 3-9. Areas not suitable for urban development because of the lack of availability of public facilities shall remain in their present use until the needed infrastructure is or can be assured of being provided.
- 3-10. The extension of urban services into agricultural areas outside the Urban Limit Line, especially growth-inducing infrastructure, shall be generally discouraged
- 3-11. Urban uses shall be expanded only within an Urban Limit Line where conflicts with the agricultural economy will be minimal.
- 3-12. Preservation and buffering of agricultural land should be encouraged as it is critical to maintaining a healthy and competitive agricultural economy and assuring a balance of land uses. Preservation and conservation of open space, wetlands, parks, hillsides and ridgelines should be encouraged as it is crucial to preserve the continued availability of unique habitats for wildlife and plants, to protect unique scenery and provide a wide range of recreational opportunities for County residents.
- 3-13. Promote cooperation between the County and cities to preserve agricultural and open space land.
- 3-14. Protect prime productive agricultural land from inappropriate subdivisions.

#### Community Identity and Urban Design

- 3-15. The design of new buildings and the rehabilitation of existing buildings shall reflect and improve the existing character of the commercial districts in the County.
- 3-16. Community appearance shall be upgraded by encouraging redevelopment, where appropriate, to replace inappropriate uses.
- 3-17. Opportunities shall be provided for retaining, enhancing and diversifying the cultural activities available to the County.
- 3-18. Flexibility in the design of projects shall be encouraged in order to enhance scenic qualities and provide for a varied development pattern.
- 3-19. Buffers shall be provided between new industrial developments and residential areas by establishing setbacks, and park-like landscaping or other appropriate mechanisms.
- 3-20. Where new electrical transmission lines are proposed, they should be developed parallel to existing transmission lines to the extent feasible. Mitigation of the environmental impact of building these facilities should be in close proximity to the area of impact.

#### Residential Uses

- 3-21. The predominantly single family character of substantially developed portions of the County shall be retained. Multiple-family housing shall be dispersed throughout the County and not concentrated in single locations. Multiple-family housing shall generally be located in proximity to facilities such as arterial roads, transit corridors, and shopping areas.

- 3-22. Housing opportunities for all income levels shall be created. Fair affordable housing opportunities should exist for all economic segments of the County.
- 3-23. A diversity of living options shall be permitted while ensuring community compatibility and quality residential development.
- 3-24. Housing opportunities shall be improved through encouragement of distinct styles, desirable amenities, attractive design and enhancement of neighborhood identity.
- 3-25. Innovation in site planning and design of housing developments shall be encouraged in order to upgrade quality and efficiency of residential living arrangements and to protect the surrounding environment.
- 3-26. Efforts to maintain and rehabilitate existing dwelling units in established neighborhood areas shall be supported.
- 3-27. Existing residential neighborhoods shall be protected from incompatible land uses and traffic levels exceeding adopted service standards.
- 3-28. New residential development shall be accommodated only in areas where it will avoid creating severe unmitigated adverse impacts upon the environment and upon the existing community.
- 3-29. New housing projects shall be located on stable and secure lands or shall be designed to mitigate adverse or potentially adverse conditions. Residential densities of conventional construction shall generally decrease as the natural slope increases.

#### Business and Employment Uses

- 3-30. A variety of appropriately-sized, well-located employment areas shall be planned in order that industrial and commercial activities can contribute to the continued economic welfare of the people of the County and to the stable economic and tax bases of the County and the various cities.
- 3-31. Employment centers in the County area shall be designed to be compatible with the nature of the surrounding area.
- 3-32. Commercial areas of appropriate size and location shall be provided to accommodate the needs of the present and anticipated population in each subregion or community of the County.
- 3-33. Well-defined commercial areas oriented to community shopping shall be provided in the County.
- 3-34. Local shopping facilities shall be distributed and spaced at intervals to accommodate the requirements of residential neighborhoods, minimize travel times, and reduce energy costs.
- 3-35. The limits of business areas shall be established, where practical, by the use of boundaries set by creeks, major roads, significant changes in topography, and other physical features in order to avoid conflicts and provide a buffer between commercial and nearby residential uses.
- 3-36. New areas of strip commercial development shall be discouraged except as provided in this plan. ("Strip commercial" shall be generally defined as commercial development of shallow depth limited to the parcels fronting on a street and extending in a linear manner for a considerable distance.)

- 3-37. New local convenience shopping shall generally be located at the intersections of major streets and highways. Such uses shall be discouraged on more than two corners of an intersection.
- 3-38. Business and professional office development shall be encouraged in areas designated for commercial land use within shopping areas and where a transition or buffer use is appropriate between commercial and residential areas.
- 3-39. Existing employment areas shall be improved to create better pedestrian circulation, bicycle paths and adequate parking.
- 3-40. Adaptive reuse of structures (i.e., remodeling or upgrading original commercial and industrial buildings) shall be encouraged.
- 3-41. The continuing orderly development of research facilities, regional offices, and light industrial uses shall be encouraged in designated areas in order to improve the economic base and provide local employment.
- 3-42. Industrial development shall be concentrated in select locations adjacent to existing major transportation corridors and facilities.
- 3-43. Industrial employment centers shall be designed to be unobtrusive and harmonious with adjacent areas and development.
- 3-44. Industries which employ the skills of County residents shall be encouraged to locate within the County.
- 3-45. The development of agriculturally-related industries which will enhance the continued productivity of agriculture shall be encouraged.
- 3-46. Water-oriented recreation uses shall be permitted in East County provided that such development is compatible with the Delta's unique ecology.

## IMPLEMENTATION MEASURES

The following specific measures should be implemented in order to carry out the land use goals and policies outlined in this chapter. The major implementation measure for this plan is a Growth Management Program, a 65/35 Preservation Standard and a ULL. The programs are described earlier in this Land Use Element (see Chapter 3.6) and in Section 4, Growth Management Element. (To the extent implementation measures referenced earlier in Chapter 3.6 are identified, they are incorporated into this list of land use implementation measures.)

### Overall Measures

- 3-a. Revise the County Zoning Ordinance and other ordinances to conform with the land use designations included in this General Plan, e.g., delete the F-R, U, A-1, and F-1 zoning districts; create a new Commercial Recreation district.



- 3-b. During project review, require that proposed uses on the edges of land use designations be evaluated to ensure compatibility with adjacent planned uses.
- 3-c. Where appropriate, require the dedication of deeded development rights to the County (or cooperate in dedication to other public agencies) for lands to be protected as open space.
- 3-d. Review proposed land development projects for consistency with land use designations and relevant policies and standards of each Element of the General Plan.
- 3-e. Review proposed amendments to the General Plan to ensure continued internal consistency among the Elements.
- 3-f. The County shall conduct a study of minimum parcel sizes in agricultural districts needed to implement General Plan policies and adopt such parcel sizes.

#### Jobs/Housing Balance

- 3-g. Adopt land use regulations which allow mixed use developments as a mechanism for achieving a jobs/housing balance.
- 3-h. Require staff reports on development applications for residential developments of 100 or more units to address the impact of that development upon the subregional jobs/housing balance.
- 3-i. Require staff reports on development applications for commercial, light industrial and office developments of more than 10,000 square feet or generating 25 or more jobs to address the impact of that development upon the subregional jobs/housing balance.
- 3-j. Provide incentives to encourage the construction of affordable housing in areas where few such opportunities exist and significant employment centers exist or are proposed.

#### Growth Management, 65/35 Plan and Urban Limit Line

- 3-k. Institute the Growth Management Program described in Section 4, taking into account fiscal constraints in accordance with Measure C - 1988. Enforce traffic level of service (LOS) standards and performance standards for fire, police, parks, sanitary facilities, water, and flood control.
- 3-l. Prepare and adopt a five year capital improvement and financing program for the purpose of meeting or maintaining traffic service and facilities performance standards for fire, police, parks, sanitary facilities, water and flood control.
- 3-m. Review and amend as necessary all adopted fee schedules to ensure that they meet the cost of planned improvements. In conjunction with the County's CEQA mitigation monitoring program, assess and monitor mitigation measures and consider adopting other development mitigation programs as needed to ensure that development is paying its share of the costs associated with new growth.
- 3-n. Work with the County Transportation Commission to determine what specific situations merit a "finding of special circumstances" under Measure C - 1988, requiring additional mitigation and/or exemption from traffic standards.

- 3-o. Seek funds to maintain and expand a Countywide comprehensive transportation model for the purpose of monitoring Countywide traffic service levels and other infrastructure.
- 3-p. Maintain the 65/35 Land Preservation Standard and devise a means of tracking urban and non-urban development and uses in the cities and unincorporated areas.
- 3-q. Maintain and enforce the ULL in accordance with the terms of this Land Use Element and Measure C - 1990. Incorporate the ULL into the County's Open Space Conservation Plan.
- 3-r. Perform an initial review of the ULL and a five (5) year periodic review of the ULL to determine whether changes are warranted, as described in this Land Use Element.
- 3-s. Establish standards and policies designed to protect the economic viability of agricultural land which may include, but not necessarily be limited to, preservation agreements, conservation easements, clustering, and establishment of agricultural mitigation fees.
- 3-t. Enforce the restrictions on open hillsides and significant ridgelines in the Open Space Element and protect hillsides with a grade of 26 percent or greater through implementing zoning and other appropriate measures and actions.
- 3-u. To the extent feasible, enter into preservation agreements with cities designed to preserve land for agriculture, open space, wetlands or parks.
- 3-v. To the extent legally permitted, advise LAFCO to (a) respect and support the County's 65/35 Preservation Standard, Urban Limit Line and growth management standards when considering requests for incorporation or annexation to cities or service districts, (b) apply the stricter of the growth management standards of either the County, the incorporating city or the annexing city or service district, when considering requests for incorporation or annexations of land to cities or service districts, and (c) require unincorporated land located within the Urban Limit Line that is included in the incorporation of a new city or annexed to a city to provide a fair share of affordable housing when and if such land is developed.

#### Community Identity and Urban Design

- 3-w. Within the Urban Limit Line, maintain visual separations between communities where the opportunity still exist.
- 3-x. Promote, devise and maintain appropriate development/redevelopment themes, including design review criteria to provide community identities for the commercial districts of unincorporated communities in the County.
- 3-y. Amend the County Code to included design review of development projects as a function of the Planning Commission.
- 3-z. Initiate and enforce, if necessary, specific development standards for both proposed and existing businesses to achieve appropriate landscaping, design and sign structures.

Residential Uses

- 3-aa. Amend the R-40 district to require a minimum lot size of 43,560 square feet; create new multiple family district(s).
- 3-ab. Periodically review and update the Housing Element of this General Plan, to ensure that it accommodates a variety of housing types and prices throughout the County.

Business and Employment Uses

- 3-ac. Stimulate increased quantities and different types of local economic development and employment growth through the adoption and implementation of a comprehensive economic development strategy for communities within the County.
- 3-ad. Identify and target suitable growth industries for future contacts to encourage their establishment within the County.
- 3-ae. Expand and pursue joint ventures between the County, cities, and private sector which attract appropriate economic development into economically depressed areas of the County.
- 3-af. Delineate precise boundaries for central commercial districts to protect adjacent residential areas and prevent thoroughfare (strip) commercial development patterns.
- 3-ag. Require new commercial development to provide separate parking areas or contribute to community parking facilities.
- 3-ah. Develop and implement a specific strategy for providing additional off-street public parking in the central commercial districts.
- 3-ai. Stimulate the sound economic development of the County by participating in efforts to coordinate industrial development policies with relevant private and public agencies.
- 3-aj. Define auto dismantling activity in the County Zoning Ordinance as an industrial use, and confine its future development to designated industrial areas.
- 3-ak. Review and revise all commercial districts defined in the Zoning Ordinance to ensure that the regulations do not allow uses in the districts that are inconsistent with this General Plan.

## POLICIES FOR THE EAST COUNTY AREA

Land Use

The following policies shall guide development in the East County Area:

- 3-46. This Plan directs most of the residential and commercial growth that is anticipated to occur in the unincorporated East County area during the planning period into the Oakley community, with smaller amounts of recreation-oriented development allowed on Bethel Island.



- 3-47. Docks and marinas permitted by the implementing zoning district shall be considered for approval in certain designated Delta Recreation areas based upon the following criteria:
- (a) where projects can be clustered and located adjacent to similar uses;
  - (b) along waterways having an adequate channel width as defined by the State Harbors and Navigation Code;
  - (c) in areas having adequate public vehicular access;
  - (d) where off-site improvements, such as required access roads, can be assigned to development;
  - (e) where adequate on-site sewage disposal can be provided;
  - (f) where located in an area served by a public fire protection district; and
  - (g) where such uses will not conflict with adjacent agricultural uses.
- 3-48. The density and development of single family homes in the East County area, in lands designated for residential or other urban uses, shall be related to service availability criteria, as defined below:

| <u>Service Availability</u>                               | <u>Minimum Allowable Parcel Size</u>   |
|---|--|
| No public water or sewer connection available.            | 5 acres  |
| One public service (sewer or water) connection available. | 1 acre   |
| Both public water and sewer connections available.        | Minimum parcel size consistent with the specified General Plan densities, as well as drainage, health, and other applicable standards. |

#### Transportation

- 3-49. Restrict access on to State Route 4 and within those areas designated for residential development.
- 3-50. Improve existing interchanges and establish new interchanges over State Route 4 by developing plans in coordination with Caltrans and the Cities of Pittsburg, Antioch and Brentwood.
- 3-51. Encourage the State to incorporate the Delta Expressway into the State Highway System as a bypass to State Route 4 and upgrade the facility to a freeway.
- 3-52. The County shall encourage the expansion of regularly scheduled transit service and express bus service to urbanizing areas east of Antioch.

Primary Zone of the Delta

- 3-53. All public and private management and development activities within the Primary Zone of the Delta shall be consistent with the goals, policies and provisions of the "Land Use and Resource Management Plan for the Primary zone of the Delta as adopted and as may be amended by the Delta Protection Commission.

## POLICIES FOR THE OAKLEY-NORTH BRENTWOOD AREA

Land Use

The following policies shall guide development in the Oakley-North Brentwood Area:

- 3-54. All special districts within the Plan Area shall work towards adoption of a common boundary. The adoption of specific boundaries for the Oakley community will provide assurance to the residents that the area will maintain its unique character. Boundaries can be delineated via the establishment of a community facilities district, county service area, e.g., park and recreation district, or community services district.
- 3-55. Subdivision of single-family residential land to less than the specified single-family density range shown on the County Land Use map shall not be approved unless all of the following criteria are met:
- (a) owner-occupants of an existing residence wish to retain their existing home and sell surplus acreage;
  - (b) the division clearly allows all property, including the existing home site, to be developed within the planned density range and to allow for appropriate street design, lot configuration, access, and utility line extension;
  - (c) all dedications for arterial and collector streets, and all water, electricity, gas, and sewer extensions, are made for all property within the subject land division; and
  - (d) no more than two parcels are created, one with the existing home and one comprising the balance of the property.
- 3-56. Design guidelines for the Oakley area shall be made. The guidelines should include themes that will assist neighborhood commercial development to reflect the residential character of the surrounding area, existing commercial development to upgrade its appearance, and that will establish architectural and landscape continuity. The design policies for the area shall be adopted by the ECRPC and confirmed by the Board of Supervisors.
- 3-57. Housing which accommodates the needs of fixed income persons, elderly persons, or both in and around the Old Town of Oakley shall be encouraged.
- 3-58. Higher residential densities around the Old Town of Oakley area shall be encouraged.
- 3-59. Existing Old Town development currently lacking on-site parking shall be accommodated through developing a specific strategy for providing off-street parking. Such a strategy would include programs to incorporate public parking into any reuse, or development of abandoned railroad rights-of-way adjacent to the Old Town area, and building new sidewalks and bicycle paths.

- 3-60. Economic development and employment growth possibilities shall be expanded by preparing a comprehensive economic development strategy. Such a strategy may include joint ventures with the private sector and the County within the redevelopment area.
- 3-61. Standards for adequate physical separation between types of industrial uses and categories of non-industrial use shall be defined and codified.
- 3-62. Industries that do not have potential for groundwater or air contamination shall be encouraged, and zoning ordinances to require conditional use permits for all projects in light industrial zones shall be amended.
- 3-63. Setbacks and other special performance criteria for all industrial uses shall be required.
- 3-64. Minimum parcel sizes sufficient to accommodate buffering, landscaping, parking, and other specific site development standards and County ordinance requirements shall be established.
- 3-65. Landscaped berms or other buffers between parking lots and streets abutting State Route 4, Neroly Road, Oakley Road, Laurel Road, and Empire Avenue shall be encouraged.
- 3-66. Agriculture-related businesses to expand or relocate to Oakley shall be assisted.
- 3-67. The Oakley Senior Housing project shall be designated Multiple Family Residential, Very High Density as it applies to this property, it is intended to support the development of up to 50 senior, Clustered housing units. If a senior citizen housing project is not constructed, the property will be limited to a single family residential density as allowed by the pre-existing (Single Family Residential, High Density 5.0-7.2 units/net acre) General Plan land use designation.

To ensure architectural design compatibility with existing and nearby homes, a visual analysis shall be provided as part of the current planning permit approval process. The visual analysis shall study and provide recommendations on a development concept which reflects the following policy direction:

- A clustered building type which allows for both one and two-story, structures; and
- Provision of adequate landscaping and other buffers to further reduce potential land use and visual conflicts with existing and potential residential development near the plan amendment area.

The resulting project shall consider use of Oakley Road and Kelsey Lane for project access. Project ingress and egress shall be designed to minimize Oakley Road turn movements. If possible, access into the area shall also consider potential development of the adjacent parcel on the east side of the site.

- 3-68. The northern portion of the Hofmann General Plan Amendment Area on State Route 4 at Cypress Road shall support up to 9.7 acres under Multiple Family Residential, Low Density and retain an area - approximately 1.4 acres in size - under the COMMERCIAL designation near the Cypress Road and State Route 4 intersection. The plan amendment proposal shall also provide at least 15 percent affordable housing to meet the requirements of State Housing Law and the County Redevelopment Agency. The ultimate development of the plan amendment area shall also be required to dedicate any needed right-of-way for the Delta De Anza trail and road improvements for Cypress Road and State Route 4.



Transportation

- 3-69. Parkways shall have a minimum right of way width of 110 feet. The following roads are designated as parkways: Oakley Road, east of Neroly Road; Laurel Road and its westerly extension; Neroly Road and its easterly extension to Delta Road; Delta Road; Lone Tree Way and its easterly extension; Live Oak Avenue from Oakley Road north to State Route 4; Empire Avenue; O'Hara Avenue.
- 3-70. The following roads are designated as transitways: State Route 4; Oakley Road; Cypress Road, west of State Route 4; Laurel Road, west of State Route 4; Neroly Road between State Route 4 and Laurel Road; Empire Avenue, between State Route 4 and Lone Tree Way; O'Hara Avenue between State Route 4 and Lone Tree Way.
- 3-71. Transit ridership through strategies, such as flexible setback and flexible parking requirements; new passenger shelters and passenger transfer facilities; pedestrian traffic signal and safety islands; as necessary at mid-block at intersection crosswalks, shall be encouraged.

POLICIES FOR THE BETHEL ISLAND AREA

The Bethel Island Area is comprised of on- and off-island areas (Hotchkiss Tract). The two areas differ with respect to soils, topographic and geographic conditions, and levee stability. As a result, different development and planning considerations must be given to each area. The on-island area consists of weak, organic soils that underlie the perimeter levee system, provides limited opportunities for evacuation in the event of a levee failure, is generally below sea level and subsiding, and provides limited opportunities for safe disbursement of flood water because it is a small island closed by levees. In the off-island area, on the other hand, the soil is sandy and less subject to subsidence, the elevation is higher, the levee system is in an improved condition and not as long, there are several evacuation alternatives, it is part of the mainland, and disbursements of flood waters are not artificially contained such that internal systems around new development will not adversely affect existing residences and structures in the flood plain. The concept for the Bethel Island Area is to preserve and enhance the rural and recreational quality of the unique area, while providing opportunities for additional residential and commercial growth tied to water-oriented recreation. The following policies shall guide development in the Bethel Island Area:

- 3-72. The approval of new development shall be limited to 2,909 primarily recreation-oriented units in the off-island area (i.e., 3,000 additional units including the 91 units already approved, but not yet built).
- 3-73. New residential development in the on-island area shall be limited at this time to approved development and one dwelling unit per parcel.
- 3-74. Additional residential density in the on-island area may be considered through subsequent amendment at the discretion of the Board of Supervisors, provided at least the following are accomplished:
- (a) a financing mechanism is fully and completely assured for improvements to the entire perimeter on-island levee system;
  - (b) the levee improvement plans are approved by Bethel Island Municipal Improvements District and the Army Corps of Engineers; and

- (b) the levee improvement plans are approved by Bethel Island Municipal Improvements District and the Army Corps of Engineers; and
  - (c) subsidence, as well as impacts on wetlands, are adequately mitigated.
- 3-75. Levee breaches on-island are prohibited unless the entire perimeter levee is improved to Army Corps of Engineers' standards.
  - 3-76. Levee breaching off-island shall be permitted on a project-by-project basis and shall only be allowed subject to the Army Corps of Engineers approval.
  - 3-77. Any internal levees must meet Army Corps of Engineers' standards. New construction must be set back from levee centerlines a minimum of 100 feet unless adequate substantiation for reduction is approved by RD-799 or BIMID. New construction not protected by certified levees must meet FEMA standards.
  - 3-78. Stilt residential structures shall be allowed only on the basis of one unit per existing parcel. Such elevated structures shall not be allowed in any new subdivisions.
  - 3-79. The off-island and on-island areas can develop 100,000 square feet of commercial development and 500 hotel rooms, consistent with FEMA standards.
  - 3-80. Marine and waterfront facilities will require a use permit to address site-specific aquatic and other issues such as wetlands, water quality, public access, and the Delta's carrying capacity for such facilities in the Bethel Island Area.
  - 3-81. To retain the characteristics of Bethel Island that make it an unique place in the Delta with its own separate identity, development shall be limited to a low overall density, and open space buffers shall be required. In addition, agricultural, open space, and wetland areas, along with rare plant communities, shall be preserved and protected.
  - 3-82. Residential development on Agricultural Lands, to the extent permitted beyond one unit per parcel in the off-island area, shall be clustered with development rights on the undeveloped land dedicated to the County.
  - 3-83. A Protection Fee shall be imposed on each new residential unit in the Bethel Island Area to acquire development rights on agricultural lands, open space or wetland areas, or to provide financing for farmers to continue agricultural production. Priority for the acquisition of open space and wetlands shall be given to the on-island area. Additional funding sources shall be explored to supplement or replace the Protection Fee.
  - 3-84. New development in the Bethel Island Area must comply with an improved financing plan for infrastructure improvements.

## POLICIES FOR THE SOUTHEAST COUNTY AREA

### Land Use

- 3-85. Numerous policies for this area were drafted by a citizens advisory committee appointed by the Board of Supervisors in 1985. Most of these policies are incorporated into this General Plan. They apply to

- 3-86. Many of the specific policy statements of this plan support the concept of allowing for multiple uses, compatible with the predominantly agricultural watershed and public purposes of the area. The policies stress the need to preserve designated agricultural lands for agricultural use, and also to allow certain other uses in the area, such as wind energy farms, mineral extraction, and reservoirs.
- 3-87. The Southeast County area is almost exclusively planned for agricultural, watershed, or public purposes. New land uses within this plan area should be limited to those which are compatible to the primary agricultural and watershed purposes of the area (farming, ranching, poultry raising, animal breeding, aviaries, apiaries, horticulture, floriculture and similar agricultural uses and structures) and consistent with the multiple use philosophy enumerated by this plan.

Subject to specific project review and the policies listed within this plan, the following uses are generally consistent with the planned agricultural areas:

- (a) Public and private outdoor recreational facilities;
  - (b) Dude ranches, riding academies, stables;
  - (c) Wind energy conversion systems;
  - (d) Single family residences on larger lots;
  - (e) Mineral resources quarrying;
  - (f) Oil and gas wells;
  - (g) Pipelines and transmission lines; and
  - (h) Veterinarian offices and kennels.
  - (i) Public purpose uses, including those uses described in policies 3-87 and 3-88 below (airport, reservoir)
- 3-88. Southeastern Contra Costa County contains a range of natural and cultural resources which warrant special recognition in the General Plan. Mineral and meteorological resources exist which have the potential to be developed as additional uses within this essentially agricultural area. Multiple uses of the land which assist in its long term protection as an agricultural area are to be encouraged.

Policies regarding these specific natural and cultural resources are briefly summarized below. However, a more detailed discussion and additional policies should be referred to in other elements of this General Plan, separated into the following topics:

- o wind turbine development or wind energy "farms" (policies are found in the Conservation Element);
- o mineral resource areas (policies are found in the Conservation Element);
- o archaeological and wildlife resources (policies are also found in the Conservation Element);
- o Contra Costa Water District reservoir(s) planned in this area (policies are found in the Public Facilities/Services Element);



- o the East Contra Costa County Airport (policies are found in the Transportation and Circulation Element);
- o existing and planned recreation uses in the area (policies are found in the Public Facilities/Services Element);
- o general circulation uses (policies are found in the Transportation/ Circulation Element); and
- o Policies and implementation measures regarding the wildlife and archeological resources of the area are included in the Conservation Element.

The southeastern portion of the County is blessed with archaeological and wildlife resources which are unique and worthy of long term protection and preservation. While in certain portions of the planning area multiple uses of the land may conflict with the need for environmental protection and enhancement, there are other areas where multiple use may reinforce preservation.

As a practical matter, it should be recognized that historically it has been the agriculturalists who have protected the unique environmental resources of the area. Their continued efforts in this regard are critical to the long range preservation of the area's resources.

- 3-89. The California Energy Resources Conservation and Development Commission has identified the Altamont Pass area, including the south-eastern portion of Contra Costa County, as an area with high wind energy potential.

The "Wind Energy Resources" section of the Open Space/Conservation Element contains a map that depicts the generalized boundaries of the wind energy resource area in Southeast County, based on materials developed for the State Energy Commission. The map identifies those areas that experience average wind speeds of at least 15 mph at an altitude of 70 feet above the ground. The same section includes specific policies that govern new wind turbine development in the County.

Clusters of wind turbines generate a certain amount of noise which could be a nuisance if new subdivisions or residences are allowed immediately adjacent to the existing turbines or on properties already approved for wind turbines. New residential uses should be discouraged within the wind energy areas. If wind farms become obsolete or are removed in the area, these policies should be reviewed through a subsequent General Plan Amendment.

Wind farm uses are to be considered appropriate within the resource area or along the periphery of the wind energy resource area, subject to a careful review of the environmental impacts of specific wind farm proposals.

- 3-90. Within Southeast Contra Costa County there is a geological deposit of dome-gine sandstone located just southerly of Camino Diablo and easterly of Vasco Road. This area is further discussed and mapped in the "Mineral Resources" section of the Open Space/Conservation Element.

Limited residential or ranchette development of these mineral properties may be appropriate, but residential use shall be identified as secondary to mineral operations and will not be allowed to preclude the full utilization of identified mineral resources. Any nearby residential use will be permitted conditionally after recognizing the probable expansion of mineral operations and accepting the possible nuisance and inconvenience associated with mineral operations.

- 3-91. Public agencies are in the process of acquiring substantial portions of the planning area to serve the needs of the growing population of the East Bay. Two major public works projects have been approved that must be reflected in this plan amendment: the proposed East Contra Costa County Airport and the Las Vaqueros Reservoir. Each is discussed further in the Circulation Element and the Public Facilities/Services Element, respectively.

The general location of the airport is shown on the land use element plan map. As the airport project proceeds, land developments in the area must take into account safety, noise, aviation easements, and preservation of the area's agricultural and biological resources.

The Contra Costa Water District has proceeded to acquire lands in Southeast County that would enable the district to build Las Vaqueros Reservoir. The district Board of Directors has decided to acquire or ensure the protection of the Kellogg Creek watershed, which covers approximately 30 square miles of the planning area. The acquisition of this watershed area in the southeastern portion of the County is consistent with this plan.

### Transportation

- 3-92. The Contra Costa Water District shall be responsible for the construction of a two lane replacement road for Vasco Road. Upon opening of this replacement road the County's interest in Vasco Road shall be finally vacated. While designated an expressway some local property owner access will be allowed as discussed in the EIR on the Vasco Road Utility Relocation project.

The northern portion of this roadway generally follows the East County Corridor Study general location. Construction of an upgraded facility larger than 2 lanes along this alignment will only be considered after completion of environmental documents discussing the impacts of such improvements.

- 3-93. This plan further recognizes that if a reservoir or reservoirs are built, that the Contra Costa Water District or other agencies may be required to construct additional secondary construction and access roads on these lands in order to serve their facility.
- 3-94. The Southern Pacific railroad provides rail service through Brentwood and Byron. No change in status is anticipated in this plan amendment. However, the railroad right of way does provide the potential for a recreational trail route and for construction of future pipelines.

## POLICIES FOR THE BAY POINT AREA

### Land Use

- 3-95. The following policies shall guide development in the Bay Point area:
- (a) Upgrade community appearance by encouraging development of new uses to replace antiquated developments.
  - (b) Provide for well designed projects and limited vehicular access to traffic arterials through the assembly of small parcels of land along Willow Pass Road.



- (c) Discourage new areas or expansion of strip commercial development in the community except as provided in this plan by the Willow Pass Mixed Use Corridor.
- (d) Achieve and maintain a healthy environment for people and wildlife, that minimizes health hazards and disruptions caused by the production, storage, transport and disposal of toxic materials.
- (e) A Redevelopment Plan for the Bay Point area was adopted by the Board of Supervisors in December, 1987. All development proposals should be reviewed by, and coordinated with, Redevelopment Agency staff to ensure compatibility with the Redevelopment Plan. Additionally, involvement with the redevelopment process will allow the County to coordinate concurrent development proposals and to possibly facilitate the construction of public improvements that will further the goals of the Redevelopment Plan.

3-96. The Boeger Ranch residential development is contingent on the construction of Driftwood Drive Extension as a collector road from Pacific to Evora Road. Permanent Open Space protection of the lands between the project and Evora Road (north half of the Shringer property) shall also be acquired and have development rights dedicated to the County. The Boeger Ranch (K&B) project shall be limited to 292 units.

3-97. Many areas designated for multiple family residential uses on the plan map were originally designed and are presently used for less intensive uses. These areas have property characteristics that would interfere with a successful conversion to higher intensity uses. Parcel sizes are small, restricting provision of on-site parking, landscaping and recreation facilities. Existing drainage facilities are antiquated and inadequate. Modifications to existing road design and access points would be desirable to handle greater traffic loads. Given these parameters, an incremental uncoordinated approach to development would probably fail to safeguard community interests.

Therefore, this plan supports the assembly of land designated for multiple family residential uses in sufficient acreages to make feasible the provision of a quality residential environment and adequate infrastructure to handle drainage and traffic concerns. Those projects that meet these objectives will be eligible for the maximum housing units within the range of the applicable density category.

3-98. The following development standards shall be applied to projects proposed in the Willow Pass Road Mixed Use Corridor:

- (a) access to parcels along Willow Pass Road should be minimized and should be from secondary roads whenever feasible;
- (b) development of shared access with uses on abutting properties should be considered at the time of project review;
- (c) the assembly and consolidated development of frontage parcels is encouraged by this designation;
- (d) control on the placement, design, number, and size of signs should occur during project review and should be adequate to inform the community of the firm's identity without being visually disruptive; and
- (e) the County shall consider the adoption of a streetscape plan for Willow Pass Road including, if appropriate, revision to existing precise alignment plans. The Plan review shall explore the



merit of a street tree/landscape program, on-street parking, restricted traffic movements and transit facilities.

- 3-99. A two-story height restriction shall be applied to the properties included in the Snow and Tener General Plan Amendments, adopted in 1984 and 1986, respectively. The properties include parcels 095-1 30-023 and 097-260-004, 005, 006, 008, 013, and 014.
- 3-100. Consider how to upgrade the Bay Point water quality including increased regulation of the system, facility improvements or, potentially, public acquisition.
- 3-101. Development of the Garrett property, which represents the eastern portion of the Garrett/Wildes plan amendment area shall be limited to 17 units. The edges of the Garrett project shall be retained in the Open Space land use designation and provide landscape buffers to reduce visual impacts of development.
- 3-102. The Wildes property, which fronts along Mota Drive, and is the western piece of the plan amendment area contains sloped areas along the southern portion of the property which should remain undeveloped. The sloped area is generally shown by the Open Space designation on the Wildes property. Development of the Wildes property shall be limited to four parcels. The new lots should avoid development on the sloped areas and to the extent possible, provide access from Rio Lane so as to avoid potential circulation conflicts with traffic at the Mota Drive/Azores Circle intersection.
- 3-103. The Canal Road realignment and the Bailey Road interchange improvements have altered public access in and around the Boe General Plan Amendment area. Because of the existing parcel configurations and limited access into the general plan amendment area, there are special circumstances which warrant the development of alternative access points.

It is the goal of the Bay Point Redevelopment program to achieve buildout of the plan amendment area in order to make full use of the site's locational advantage next to major transportation facilities (Highway 4, and the Bay Point BART station).

In order to achieve full buildout of the plan amendment area, all feasible access (including parking) alternatives which emphasize Bailey Road access shall be considered when reviewing development plans for this area. Additionally, because of the small parcel sizes in the southwest part of the general plan amendment area, new development on these parcels should be covered by a unified development application to ensure compatibility with adjacent uses and to take advantage of the high accessibility at this location.

- 3-104. The Shriner Property will allow for up to 46 residential units in the area designated for Single Family Residential High Density uses as shown on the Land Use Element plan map if the remainder of the site is protected as project open space. A water tank and access road will be allowed within the open space designated areas subject to final location and design of landscaping acceptable to the County Zoning Administrator. Residential development of the site is contingent on the resolution and provision of adequate flood protection facilities being assured as determined by the County Public Works Department. The site plan will provide for additional setbacks from the PG&E right-of-way as prudent avoidance due to EMF issues.

#### Transportation

- 3-105. The number of streets and driveways intersecting or entering Willow Pass Road shall be minimized.

- 3-106. Well-designed projects and limited vehicular access to traffic arterials shall be encouraged through the assembly of small parcels of land along Willow Pass Road.

#### POLICIES FOR THE MORGAN TERRITORY AREA

- 3-107. A separate General Plan/zoning conformity study shall be initiated by the County in the Morgan Territory Road area, south of Marsh Creek Road.
- 3-108. The restriction on further fragmentation of parcels is crucial to this plan. A rezoning study should be initiated on this planning area to apply new, more stringent zoning categories.
- 3-109. A scenic route specific plan will be implemented to ensure adequate rights-of-way for the scenic routes along Morgan Territory Road and Marsh Creek Road.
- 3-110. Development on the Pacini property will be considered in accordance with this land use designation of Single-Family Very Low Density and subject to conditions and terms imposed on approved maps and plans.

#### POLICIES FOR THE CLYDE AREA

- 3-111. Although the small town of Clyde is mostly built out, there are vacant properties adjacent to the Contra Costa Canal and near the community park which are being developed. Any future infill within the area must conform to the following policies:
- (a) the existing residential neighborhood is designated Single Family Residential-High Density (5.0 to 7.2 units per net acre), but in the Clyde area the density of any infill housing (excluding the area described in (b) below), is not to exceed 6 units per net acre;
  - (b) vacant land adjacent to the Contra Costa Canal is designated Single Family Residential-Medium Density (3.0 to 4.9 units per new acre). This reduced density reflects larger lots in this steep areas and will help to avoid excessive traffic along narrow Park Street;
  - (c) new construction should be compatible with the existing architecture to the extent possible. Ultra modern design in architecture should be discouraged; and
  - (d) the burden of providing adequate utilities and traffic circulation for new construction shall be borne solely by the developer.

#### POLICIES FOR THE BUCHANAN FIELD AREA

##### Land Use

- 3-112. The General Plan Policies for Buchanan Field Airport are set forth below, and additional policies may be found in the Transportation and Circulation Element (a description and policies regarding airport operations and roadways in the area), and the Noise Element (a description and policies regarding acceptable noise contours).

- 3-113. Two areas adjacent to the airport are designated for commercial uses: 13 acres located at the intersection of John Glenn Drive and Concord Boulevard, and 22 acres adjacent to the existing mobile home park, west of the airport runway.

A range of commercial uses are allowed in this category. The actual uses allowed will be finalized through review of projects and leases for the use of the land.

- 3-114. For these two commercial areas to be developed, transportation improvements are required to be constructed or committed. Such improvements will be tied directly to the County leasing of these areas for development. The extent of improvements are to be determined by the Board of Supervisors as part of the bid package.
- 3-115. The area designated for commercial use at the entrance of John Glenn Drive is limited to development of 220,000 square feet of space; the area on Marsh Drive is limited to 180,000 square feet.
- 3-116. The major privately owned lands within the area are designated for light industrial use and are located along I-680, west of the airport, between the existing mobile home park and the golf course.
- 3-117. The California Public Utilities Code requires that the intent and purpose of the plans and policies adopted by the County Airport Land Use Commission be incorporated into the County General Plan. The commission has adopted numerous regulations which strictly define what types of land use, and the design of those uses, which will be allowed within the Commission's airport "planning area" and within designated "safety zones" under the airport's flight path. These policies and regulations are detailed in the "Airports and Heliports" section of the Transportation and Circulation Element.

#### Transportation

- 3-118. [See the policies listed under the "Airports and Heliports" section of the Transportation and Circulation Element (Section 5).]

#### POLICIES FOR THE CENTER AVENUE (PACHECO) AREA

- 3-119. The plan for the area in Pacheco located generally along Center Avenue west of the flood control channel is designated for Multiple Family Residential-Medium and High Density (12.0 to 20.9 units and 21.0 to 29.9 units per net acre, respectively). The Plan endorses efforts to consolidate smaller parcels into logical groupings for the private redevelopment of areas from single family homes to multiple family residential uses. Projects covering smaller existing lots should lead to higher densities and better designed projects.

Additionally, consolidation of lots should lead to fewer access points onto arterial and collector roads such as Center Avenue and Deodar Drive. North of Center Avenue, it is hoped that projects can be grouped into three or four applications, and south of Center Avenue applications should include all of existing blocks or the remnants of existing blocks.

- 3-120. The Plan recognizes the historical significance of the W.T. Hendrick house (218 Center Avenue) and encourages its continued preservation. Development that surround the house should be designed in a fashion that compliments the structure and works toward its continued preservation.



## POLICIES FOR THE VINE HILL/PACHECO BOULEVARD AREA

Land Use

- 3-121. The scenic assets and unstable slopes of the Vine Hill Ridge are to be protected for open space/agricultural use.
- 3-122. The residential neighborhood east of I-680 shall be buffered from the industrial/land fill-related uses.
- 3-123. Approximately 40 acres of land south of the ATSF tracks, between Morello and Pacheco, is designated "Agricultural Lands," to encourage the continued operation of the Viano family vineyards and winery.

Transportation

- 3-124. The County should cooperate with landowners in the Waterbird Way corridor north and south of the ATSF railroad tracks to develop a financial plan for the extension of Waterbird Way south to Imhoff Drive. Access to industrial land south of the railroad tracks shall not be allowed though the adjacent residential neighborhood.

## POLICIES FOR THE PLEASANT HILL BART STATION AREA

Land Use

- 3-125. The area immediately adjacent to the Pleasant Hill BART station is the subject of special development standards outlined in the Pleasant Hill BART Station Specific Plan, adopted in 1983 and as amended through 1988. Most of the residential and commercial development allowed under this specific plan has already been approved by the County, with the exception of development on a large parcel owned by the BART District, much of which has not yet been approved for construction. To assist in the assemblage of development sites and to finance required infrastructure to support the development, the County, in 1984, adopted a Redevelopment Plan for the area. The Redevelopment Plan was amended in 1988 to facilitate the development of affordable rental housing in order to achieve a jobs/housing balance.
- 3-126. The overall goals for the Pleasant Hill BART station area are to:
  - (a) increase the concentration of high intensity employment uses and affordable housing in the area to better utilize the regional transit accessibility provided by BART;
  - (b) integrate housing into the area where environmental constraints (such as noise from I-680) or overall land use considerations do not preclude it;
  - (c) provide sufficient retail and other commercial services and public open space amenities for station area employees, BART riders, and residents of the station area and nearby residential and commercial uses;
  - (d) promote a station area appearance which will project a positive image and have high regional and local identity;

- (e) achieve cooperative development actions by BART and the private sector which will more fully utilize the station area resources; and
- (f) develop areas intensively used by pedestrians at a human scale and with adjoining uses which will visually and functionally enliven the area.

3-127. There are several specific plan policies which shall be applied to development proposed for the BART District property at the Pleasant Hill station. Refer to the Pleasant Hill BART Station Specific Plan for the policies.

### Transportation

3-128. In cooperation with Pleasant Hill, Walnut Creek, and transit operators, determine the feasibility of establishing bus service along the SPRR right-of-way between Concord and Rudgear Road.

### POLICIES FOR THE OAK ROAD AREA

3-129. The area east of Oak Road between Todd Lane and Walden Road is designated Multiple Family Residential-High Density, with a density range of 12.0 to 29.9 units per acre. However, developments in excess of 22 units per net acre shall only be considered for each of the parcel assembly areas shown in Figure 3-3 after preparation of an Environmental Impact Report. In addition to the normal CEQA concerns, the EIR will need to explore off-site transportation fees and impacts to adjacent single family neighborhoods.

3-130. Projects proposed in the Oak Road area described above shall be granted only through a Planned Unit District zoning process which includes all parcels within one of the specified sub-areas shown on Figure 3-2, i.e., all parcels fronting along Kingston Place or Annette Court. Applications for areas smaller than these sub-areas shall be restricted to residential densities allowed by the R-15 zoning.

Projects in the area shall be designed in such a way as to minimize traffic and drainage impacts in the area. Multiple family projects will be required to participate in off-site traffic improvements such as widening Oak Road to its planned ultimate width across the Contra Costa Canal, signalizing the Oak Road/Walden Road intersection, and area-wide drainage improvements. In addition, any project shall be designed to prevent runoff onto neighboring properties except through specific flood control improvements.

### POLICIES FOR THE CHERRY LANE AREA

3-131. Properties between Del Hombre Lane and Cherry Lane are designated Multiple Family Residential-Very High Density, which allows construction of apartment or condominiums at a density of 30.0 to 44.9 units per net acre. The purpose of the designation is to allow for more intense housing adjacent to the Pleasant Hill BART station.

Projects in this area shall be designed and developed to minimize impacts on adjacent single family residential areas along Cherry Lane, and to discourage traffic diversion through the neighborhood. All development shall have access from Del Hombre Lane or at the southern end of Cherry Lane, and shall be designed to provide a transition or buffer to the adjacent single family areas. Special consideration will be given for rental housing in the area.

- 3-132. The boundary between the multiple family housing and the office uses that are designated along Treat Boulevard shall be treated flexibly. The following criteria shall apply to office projects in the area:
- (a) minimum development standards shall be those of the Limited Office zoning district;
  - (b) no parking shall be permitted on Treat Boulevard;
  - (c) no new ingress or egress is to be permitted from Treat Boulevard; and
  - (d) consideration shall be given to commercial uses that provide services to the offices on the site.

A parallel service road northerly of Treat Boulevard will need to be completed to serve new office uses. Parking for those areas will be handled in a fashion that is consistent with the existing design theme of buildings fronting along Treat Boulevard.

- 3-133. The area east of the first phase of the Hookston Square office complex on Buskirk Road shall be designed to be compatible with, and hopefully an extension of, the existing project. New office development shall be designed in such a fashion as to minimize traffic and drainage impacts on the area. Development will be required to participate in off-site right-of-way and drainage improvements.

#### POLICIES FOR THE SARANAP (WALNUT CREEK) AREA

- 3-134. The undeveloped hillside south of Olympic Boulevard and west of Tice Valley Boulevard is designated for Single Family Residential-Medium Density development along the base of the hill along Olympic, with the remainder of the site designated as Agricultural Lands, to reflect the steep, unbuildable slopes.

#### POLICIES FOR THE ALAMO-DIABLO-BLACKHAWK AREA

- 3-135. Promote the individuality and unique character of each community based on existing community images.
- 3-136. The character of the area as one of predominantly single family residences shall be developed, and multiple family residential units shall be provided in suitable densities and locations. A range of densities shall be offered in order to provide for a variety of family sizes, income levels, and age groups.
- 3-137. Commercial development specifically directed to the needs of the neighborhood and community shall be encouraged. Large-scale commercial uses which rely on drawing business from outside the community are inconsistent with this plan.
- 3-138. Alamo's commercial district serves primarily the surrounding residential areas. This plan allows for continued commercial growth within the defined commercial area, which is separated from existing residential areas by the railroad on the west and transitional office uses along Orchard Court. This plan limits the expansion of these transitional uses to their existing boundaries north and south along Danville Boulevard.



- 3-139. It is the intent of this plan that the viability and desirability of single family residential uses on Jackson Way, South Jackson and Linden Court be preserved. No land use changes or project characteristics shall be permitted which would diminish these residential areas or induce land use transition.
- 3-140. The portion of Danville Boulevard north of Del Amigo Road should remain a two lane road, however, minor improvements to provide additional safety and increased capacity are acceptable.
- 3-141. The lands shown as residential on the Land Use Map adjacent to the portion of Danville Boulevard between Del Amigo Road and Rudgear Road shall be restricted to residential uses. Nonresidential uses under land use permits are inconsistent with this Plan and shall be avoided.
- 3-142. When rezoning in Alamo, the appropriate single family residential zoning will include R-20, R-40, R-65 and R-100 and P-1. Both Alamo and Diablo have special characteristics which preclude clustering in established areas.
- 3-143. Encourage commercial development that is related to the needs of the neighborhood and community. Regional scale shopping centers are not considered appropriate.
- 3-144. Developments shall be reviewed to ensure the continued rural character of the area.
- 3-145. Developments within the Foskett Plan Amendment area shall be developed under a Planned Unit Development zoning process. The two southern lots within the amendment area shall be limited to 10 lots, the easterly lot to 6 units and the westerly to 3 lots. Applications within the area will be reviewed to determine the appropriate buffer to the planned Single Family Residential Very Low Density lands to the south and east.
- 3-146. Development of the Dame Property, which is adjacent and just east of the Blackhawk Commercial Center, shall be limited to a maximum of 157 townhomes. Primary vehicular access shall be from Camino Tassajara Road with an emergency vehicle access at the north end of the property subject to the concurrence of the San Ramon Valley Fire Protection District. Additional landscape buffers and setbacks should be provided between proposed structures and the existing homes in the Bettencourt Ranch and Blackhawk projects in order to reduce visual impacts of development. As part of the plan amendment, the project is also required to provide at least 15 percent of the total number of units for affordable housing per County guidelines. The project shall provide its own on-site recreation facilities and a mechanism to ensure their maintenance.
- 3-147. Development of the Alamo Springs property which is adjacent to Interstate 680 at the ends of La Gonda Way and Los Balcones Drive in the Alamo/Danville area shall be limited to a maximum of 58 single family residential units. Primary vehicular access shall be from La Gonda Way. Open Space lands shall be deed restricted to Contra Costa County and the Town of Danville and maintained as a project buffers, fire breaks, permanent private open space and publicly-accessible trails. Active or passive project recreation facilities may also be permitted in certain portions of this designation.

The residential designation provides for a maximum of up to 58 dwelling units. The boundaries are generalized but encourage development within the previously graded areas of the ridgetop and generally preclude development that would be visible from adjacent valley floors.

Development shall be designed to maximize protection of existing mature Valley Oaks on site, including those trees in proximity to proposed development.



Figure 3-2 Unincorporated Communities with Adopted Area Policies

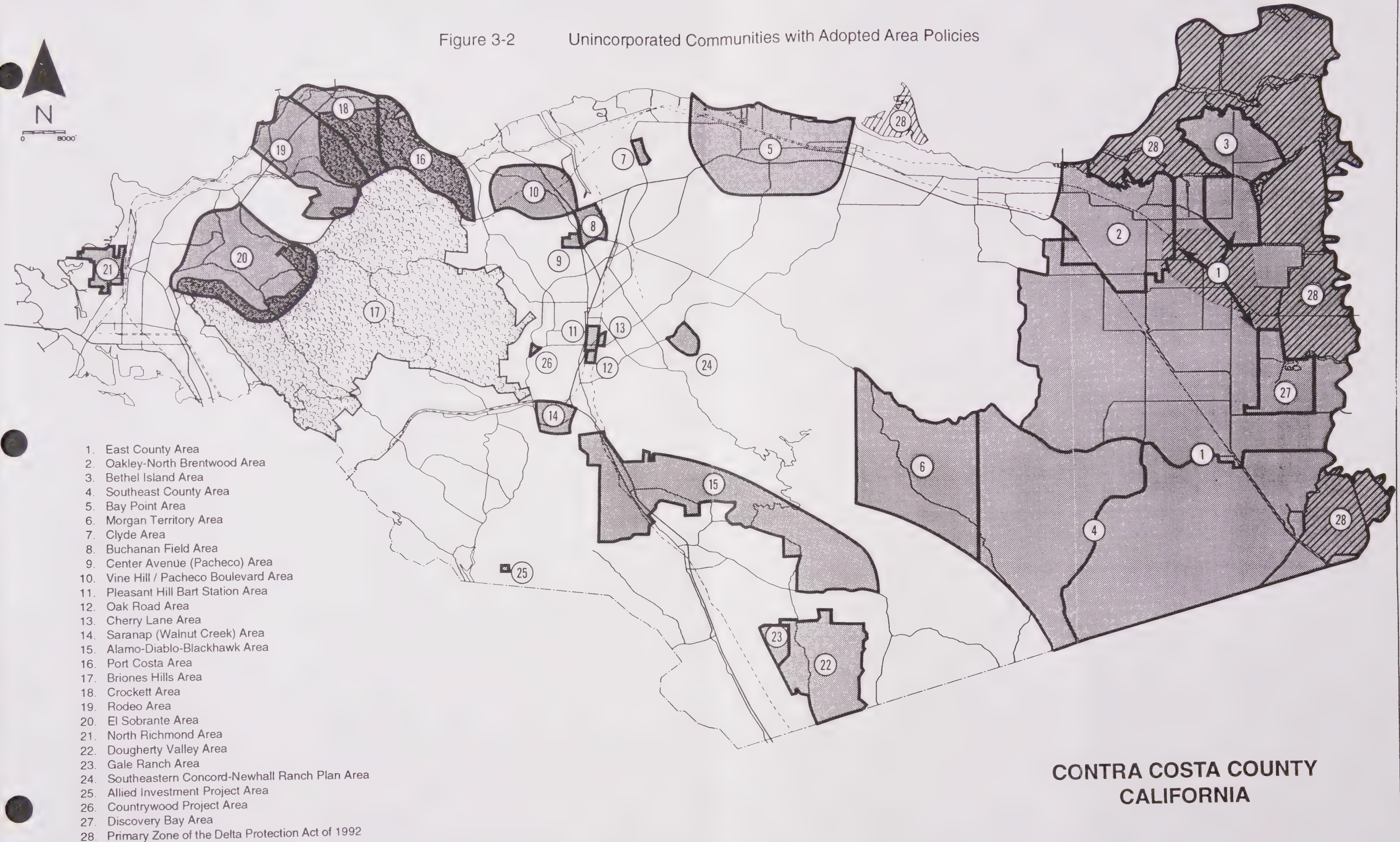
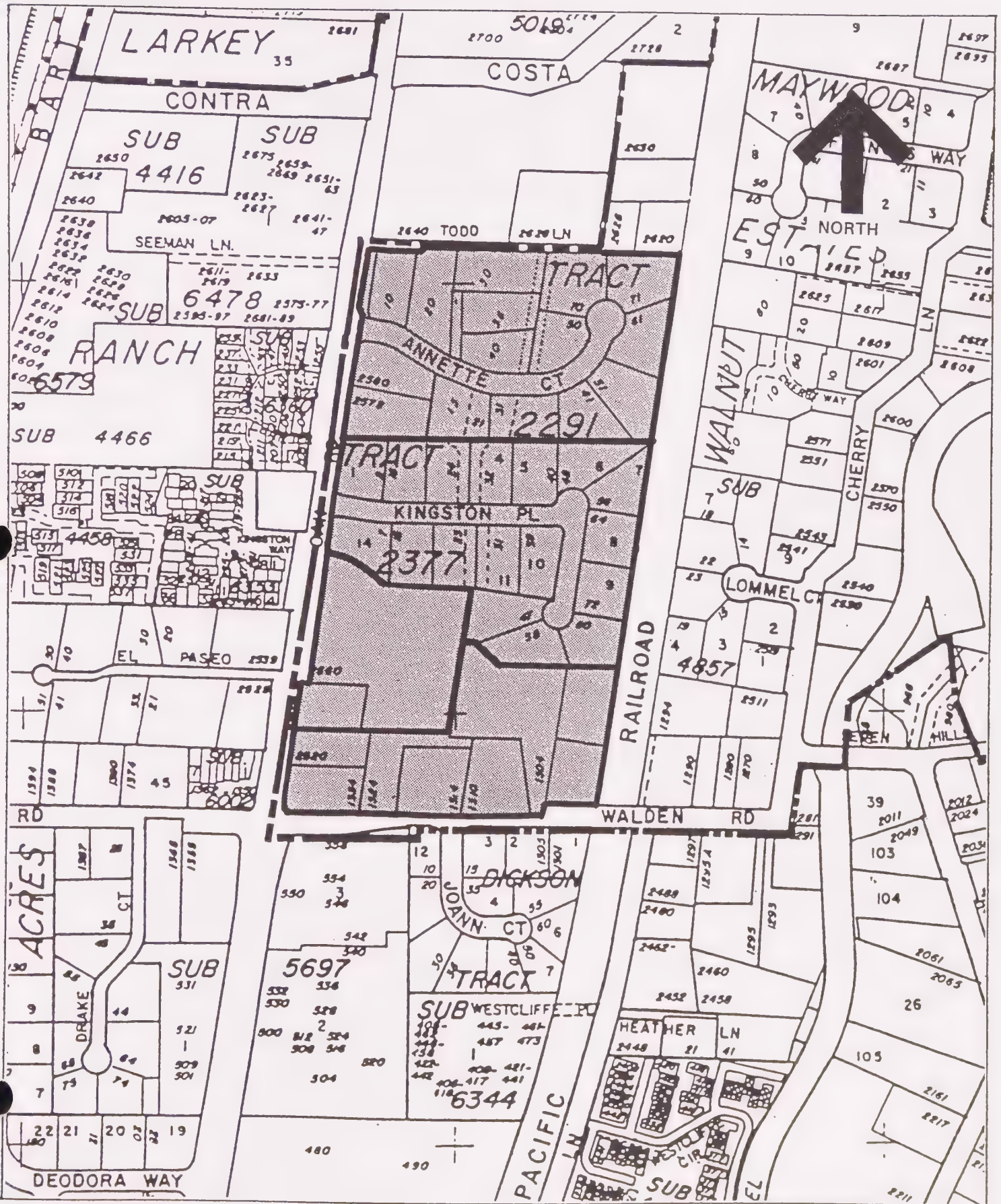






Figure 3-3

Oak Road Parcel Assembly Areas



- 3-148. The Laverock Lane general plan amendment is intended to support up to six residential parcels because it will use minimum grading and will not lead to significant disturbance of the existing topography. Creation of new parcels are subject to the provision of road frontage improvements required by the County Public Works Department. New access points along Vernal Drive and Laverock Lane shall be minimized by using shared private driveways where feasible. Additionally, to retain the character of the neighborhood, new structures shall be limited to two stories in height and shall be designed to ensure architectural compatibility with the older homes in the area. Finally, to minimize any visual obtrusions, the use of non-reflective building materials and extensive, drought tolerant landscaping shall be incorporated into any development plans for this area.

#### POLICIES FOR THE PORT COSTA AREA

- 3-149. The Plan for the Port Costa area restricts multiple family dwellings to multiple use buildings in the commercial area.
- 3-150. The Plan endorses the establishment of a regional recreation area in the vicinity of Port Costa which is oriented towards pedestrian use and day use.
- 3-151. A key concept of the Plan is to permit only open space uses on the lands surrounding the village, as well as the balance of the planning area.
- 3-152. The Plan limits commercial development to small shops that are on the scale of small specialty and neighborhood retail shops and that avoid automobile-oriented uses.
- 3-153. The design of structures in the commercial area can have a significant effect on the character of the district. The following design policies are provided so that construction and renovation in the commercial area will preserve and contribute to the unique and historic nature of the town:
- (a) New construction must be placed close to the property line along the street, rather than set back on the lot, to provide for continuous commercial frontage along the sidewalk. Variances from required setbacks may be necessary to accomplish this purpose. However, placement of on-site parking in front of a proposed structure is not acceptable; and
  - (b) Building design should complement existing commercial structures and the historic character of the town. The incorporation of historic design features such as window moldings, dormers, balustrades, columns, wood siding, brackets and detailed cornices is encouraged. The facade treatment is particularly important. Care should be exercised in the selection of building materials and colors.
- 3-154. While the Countywide Open Space Element and Conservation Element offers policies for general application, this plan sets forth the following specific policies for the Port Costa area:
- (a) Subdivision of open space lands into ranchette size parcels is not in conformance with this plan; twenty acres is the minimum parcel size; and
  - (b) Development of open space lands for residential uses is contrary to this plan. (In the event the Plan is amended to allow subdivision of open space lands for residential purposes, proposed projects must utilize a planned unit development format, as reflected in the P-1 zoning ordinance.)



## POLICIES FOR THE BRIONES HILLS AREA

- 3-155. This plan strongly supports the intent of the Briones Hills Agricultural Preservation Area compact that was signed by the County and the cities of Martinez, Pleasant Hill, Walnut Creek, Lafayette, Orinda, Richmond, Pinole, and Hercules in 1988.

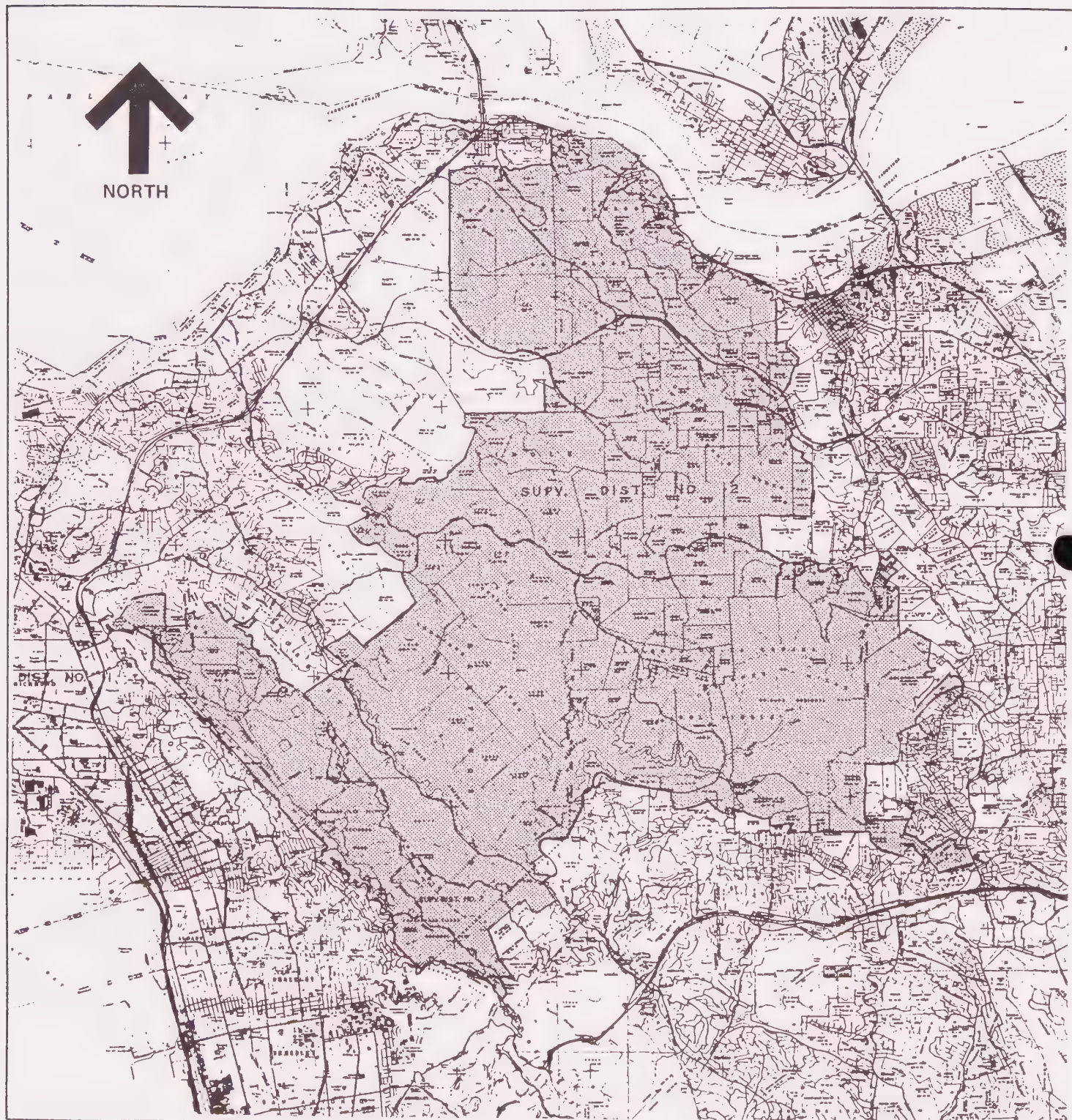
The compact states that the jurisdictions voluntarily agree not to annex any lands within the 64 square mile area for the purposes of allowing urban development (see Figure 3-4). This rural area includes large properties owned by either the East Bay Municipal Utility District or the East Bay Regional Park District, which are designated "Watershed" and "Parks and Recreation" on the General Plan land use map. The remaining properties are used primarily for grazing cattle and are designated "Agricultural Lands." This plan anticipates that the area will remain in public and agricultural use during the planning period.

## POLICIES FOR THE CROCKETT AREA

- 3-156. In cooperation with the Crockett Improvement Association, develop Specific Plans for such purposes as the rehabilitation of commercial areas, land use decisions and growth management, public safety, regional traffic controls and major transportation facilities such as bridge and BART station.
- 3-157. Discourage industrial traffic that could impact the safety and efficiency of Crockett's non-industrial and emergency vehicle traffic.
- 3-158. Extend Cummings Skyway west of I-80 to San Pablo Avenue to provide direct freeway access for industrial traffic, to minimize industrial traffic through Crockett and Rodeo, and to direct east-bound regional traffic from the San Pablo reliever route back onto I-80 prior to entering Crockett.
- 3-159. Recognize that Crockett was not designed for use by an abundance of motor vehicles. Narrow streets and a lack of off-street parking have resulted in congestion, particularly parking congestion. Personnel of the Crockett-Carquinez Fire Protection District fear the possibility that fire fighting equipment may be blocked in an emergency situation. Expanded residential areas should not be served by existing roadways that function as local Roads.
- 3-160. The goal of the Plan is to protect and enhance the quiet, small town atmosphere of Crockett's residential neighborhoods, and provide for new development that is compatible with this goal.
- 3-161. Encourage mixed uses in the downtown area, consistent with the present pattern of residential and business uses.
- 3-162. Emphasize office uses along Loring Avenue in order to broaden the employment base and to minimize parking congestion.
- 3-163. Provide that homes located in extreme or high fire hazard areas be constructed with fire-resistant materials and the surroundings be irrigated and landscaped with fire-resistant plants.
- 3-164. The category of Single Family Residential-Low Density occurs selectively within the Planning Area. One area is along Dowrelia Drive along a steep hillside with poor road access. A limitation on additional development is appropriate here without major improvements to road access.



Figure 3-4 Briones Hills Agricultural Preservation Area



BRIONES HILLS AGRICULTURAL PRESERVATION AREA  
( ADOPTED 3/ 1987 )



- 3-165. The area located immediately west of the I-80 Carquinez Bridge will allow up to 18 new homesites within the area designated for Single Family Residential High-Density. Protection of the right-of-way for improvements to the Carquinez Bridge shall be assured through the use of Planned Unit Development Zoning and shall be conditioned through such rezoning.
- 3-166. A large vacant parcel owned by the County located adjacent to I-80 northeast of the Wickland Oil Company tank farm is designated Public and Semi-Public. This property is to be reserved for construction of a planned industrial arterial road between I-80 and San Pablo Avenue.
- 3-167. Projects proposed along scenic routes will be reviewed to determine if there would be adverse visual impacts, and if so, mitigation measures will be applied. The guidelines for determining visual impacts include, but need not be limited to, the following:
- (a) long views across Carquinez Straits or the Bay should not be blocked;
  - (b) if a structure interrupts long views across Carquinez Straits or the Bay, the structure should be designed to enrich the scenic quality as much as possible;
  - (c) extreme topographic modification, such as cutting off a ridge top, is to be avoided; and
  - (d) structures highly visible from scenic routes should be designed to blend and harmonize with the natural scenery or background.
- 3-168. In order to protect the scenic environment of Crockett, it is a policy of this plan that identified scenic ridges and woods should not be obliterated. Any construction that takes place on identified scenic ridges should be designed with respect for the natural scenic qualities of the locality. In areas designated for development of steeply sloping lands, the following principles should be strictly applied:
- (a) High quality engineering of slopes is required to avoid soil erosion, downstream flooding, slope failure, loss of vegetative cover, high maintenance costs, property damages, and damages to visual quality. Particularly vulnerable areas should be avoided. Slopes over 25% are generally not suited for conventional cut and fill pad development;
  - (b) Where flood control and drainage works are required along natural water courses, special consideration should be given to using innovative means of retaining the natural appearance of the waterway, and preserve the vegetation and wildlife it supports;
  - (c) Conservation of the scenic beauty of the planning area requires restoration of natural contours and vegetation after grading and other land disturbances, and the design of public and private projects to minimize damages to significant trees and other visual landmarks;
  - (d) Public facilities for outdoor recreation should remain an important land utilization objective in the community, to promote high visual quality, air quality maintenance, and to enhance outdoor recreation opportunities of all residents; and
  - (e) Extreme topographic modification, such as filling in canyons or removing hilltops is to be avoided. Clustering and planned unit development approaches to development are encouraged. All future development, whether large or small scale, should be based on locating safe and suitable sites for buildings, roads and driveways. Edwards Canyon is very sensitive to erosion and siltation problems and should be given special protection.

Scenic Waterways are watercourses which receive use by fishing and recreational boat traffic and traverse areas of significant scenic quality. The scenic waterway designation applies to the waterway and its shoreline.

- 3-169. The shoreline and hills along the Carquinez Strait between Crockett and Martinez constitute one of the few undeveloped coastal areas in the East Bay. The scenic beauty of the area enhances, and is complemented by, the historic town of Port Costa. Preservation of this resource through the establishment of a recreation area is encouraged by this plan.
- 3-170. Crockett has an abundance of charming Victorian buildings. The special scenic and historic qualities of the town should be reflected in a sensitive approach to rehabilitation of these buildings. The structures listed below have been identified as local historic places, reflecting their historic and cultural importance to the community. It is a policy of this plan that the following places should be protected and their historic qualities should be preserved and enhanced:
- (a) the American Legion Hall at Pomona and Alexander Streets;
  - (b) the Rolph Park Monument at Pomona Street and Rolph Park Drive;
  - (c) the Railroad depot on Loring Avenue;
  - (d) the Crockett Auditorium on Pomona Avenue;
  - (e) the Episcopal Church on Pomona Avenue;
  - (f) the C&H Company House and Guest house in Crotona Heights;
  - (g) the Crockett Library on Loring Avenue;
  - (h) the Edwards Homestead; and
  - (i) the Loring Road Victorians.
- 3-171. Development of the Pointe Crockett General Plan Amendment is intended to support up to 100 units, while the exact placement of housing units and open space areas will be further defined through the site planning process. The dedication of additional property to the appropriate public agencies for open spaces and road improvement purposes will also be secured through the site planning process of considering the proposed residential projects.
- 3-172. The Crockett Senior Housing Project site may support a very low or low income senior housing project for up to thirty-seven units. If a low income senior housing project is not constructed on this site, other multiple family uses may be allowed.

#### POLICIES FOR THE RODEO AREA

- 3-173. Mitigate the affects of industrial traffic on downtown streets.
- 3-174. Direct the major portion of new residential development towards infilling and redevelopment of Rodeo proper.
- 3-175. Encourage reuse of existing buildings.



- 3-176. Establish the waterfront area as a focal point for the community by the development of a mixture of multiple family parkland, retail and commercial recreational land uses.
- 3-177. Focus waterfront development around a shoreline park and promenade.
- 3-178. Develop a portion of the Rodeo Creek channel as a linear park.
- 3-179. Maximize public access to the bay.
- 3-180. Provide for a creek setback zone in Franklin Canyon to preserve the natural drainageway.
- 3-181. Encourage particularly the renovation of Rodeo's notable architectural specimens.
- 3-182. The policies set forth below are intended to guide the revitalization of Old Rodeo.
  - (a) A mixture of land uses, residential and commercial, must be established;
  - (b) A community parking plan must be devised and implemented to provide a sensible framework for development in Old Rodeo;
  - (c) When on-site parking is provided it should be established at the rear of commercial properties so that a unified commercial frontage is presented to the sidewalk;
  - (d) Zero building setbacks (as provided for in the C-B zone or by variance procedures) are necessary for continuity with existing buildings;
  - (e) Landscaped courtyards, atriums and streetside plantings should be included in development plans to provide visual and physical relief from the hard surfaces of the urban landscape;
  - (f) Sitting places for resting, socializing or people watching should be incorporated into project designs;
  - (g) Developers are encouraged to preserve and reuse Rodeo's architectural specimens; and
  - (h) Provide for integration of development in Old Rodeo with the waterfront area.
- 3-183. The waterfront is one of Rodeo's biggest assets. However, at the present time access to the waterfront is limited both visually (by the service commercial type buildings located along San Pablo Avenue) and physically (by the Southern Pacific railroad line). By designating this area Commercial Recreation in the Plan it is anticipated that properties will eventually convert to uses which capitalize upon the proximity of the bay.

The Recreation Element provides for a waterfront promenade between the marina and the sanitary district facility. This linear recreation facility in combination with commercial recreation businesses could provide an exciting focal point for the town.

Large scale development in the Commercial Recreation area must be predicated upon a thorough study of the waterfront. Comprehensive development policies incorporated into a specific plan or waterfront development plan and implementation program must be in place before such development can proceed.

- 3-184. The property south of 7th Street along both sides of Willow Avenue up to I-80, while designated for Commercial, shall be highway-oriented. The linear park proposed along the Rodeo Creek Channel will need to be integrated into the design of this property. Development on parcels along the proposed park portion of the creek should be oriented to the creek as well as surrounding roads and parking lots. The linear park can serve as a bicycle and pedestrian corridor to the Rodeo Shopping Center as well as a space of recreation. This area will need to be heavily landscaped to minimize impact on adjacent residential areas. Development of this area is to be with low level buildings and the site between Hawthorne and 7th Street must be developed as an integrated unit. The northern boundary of this site is intended to reflect the planned realignment of 7th Street to form an intersection with San Pablo Avenue.
- 3-185. An isolated parcel along Willow Avenue abutting Hercules, between San Pablo and I-80, is designated Office, but due to the surrounding street pattern, land uses which generate large amounts of traffic are not compatible with this location.
- 3-186. Retail businesses and services directly or indirectly related to recreational uses of the shore area are compatible with the Commercial Recreation designation, including restaurants, chandlers, hotels or motels, and bait and tackle shops.
- 3-187. The Light Industry designation is employed in the Franklin Canyon area along the north side of Highway 4, across from the golf course. This is a particularly striking section of a designated scenic route and its visual beauty must be preserved through careful scrutiny of proposed light industrial projects. In particular, project proponents should address height, color and appearance, and landscaping.
- 3-188. A buffer of Agricultural Lands around the eastern Union Oil property is created in this plan to separate the Viewpointe residential area from future industrial development on the Union property. These open space lands should remain essentially undeveloped.
- 3-189. In the Rodeo area there are presently no public park or recreation areas separate from school sites (which are designated Public/Semi-Public), aside from the public access designated on the shore. Private property shown in this designation such as the Franklin Canyon Golf Course should remain in essentially open space recreation uses. More intensively developed, privately owned recreation property is designated as Commercial Recreation.
- 3-190. Development of the opposite side of 7th Street is needed to complete the alignment of 7th Street and establish this important circulation connection.
- 3-191. This plan proposes three new recreation sites in Rodeo plus the development of unused land at Hillcrest Elementary School. The Plan designates a linear park and trail along the Rodeo Creek channel from Interstate 80 north-northeast to 4th Street. A waterfront promenade is indicated running between the railroad overpass to the marinas and the Rodeo sewage treatment plant. The promenade is intended to focus upon one of Rodeo's greatest amenities, San Pablo Bay.
- 3-192. This plan supports the concept of the Carquinez Straits Regional Shoreline Park on the border between the Rodeo and Crockett planning areas, which is planned by the East Bay Regional Park District in their Master Plan. This plan also affirms the policy in the East Bay Regional Park District's Master Plan that a regional shoreline trail extending from Martinez to Point Pinole shall be implemented.

The trails plan also shows a trail along Rodeo Creek from the southwestern edge of the planning area to the waterfront downtown.



- 3-193. The majority of open space in this plan is located in the Franklin Canyon area and the adjacent hills. The steep topography and unstable slopes which characterize the hills limit their fitness for development.

Open space designations for this area reinforce the Countywide goal of agricultural preservation for continued agricultural productivity. The existing pattern in the open space area of relatively large parcels under consolidated ownership is necessary to successful range practices and will be maintained under this plan. The scenic value of the Franklin Canyon area has been asserted by the Rodeo community and is reflected in the scenic route designated for Highway 4 in the scenic routes section of the Transportation and Circulation Element. The hills and ridges along this route are the primary source of the corridor's visual quality and every effort should be made to protect its scenic characteristics.

- 3-194. Because of noise related impacts, both from transportation sources and from industry, acoustical studies will be required for major new developments and multiple family projects in the Planning Area even those extending beyond the 60 CNEL Noise Contours.

#### POLICIES FOR THE EL SOBRANTE AREA

- 3-195. In cooperation with the City of Richmond, develop a Specific Plan for the San Pablo Dam Road commercial corridor to provide detailed plans and implementation measures to increase parking for shoppers and increase roadway capacity for through traffic.
- 3-196. Minimize the number of streets and driveways intersecting or entering San Pablo Dam Road, Appian Way and Valley View Road.
- 3-197. Provide for well-designed projects and limited vehicular access to traffic arterials through the assembly of the deep, narrow parcels of land along San Pablo Dam Road and Appian Way.
- 3-198. The overall goal of the area is to retain and reinforce the semi-rural and suburban character of the community with its strong emphasis on single family residences, the feature which has drawn most residents to the area.
- 3-199. Provide for well designed projects and limited vehicular access to traffic arterials through the assembly of the deep, narrow parcels of land along San Pablo Road and Appian Way.
- 3-200. Discourage new areas of strip commercial development in the community.
- 3-201. Require development of more public off-street parking in the commercial core area along San Pablo Dam Road, so as to increase traffic bearing capacity of the arterial.
- 3-202. Upgrade the community's drainage system to eliminate problems caused by local inundation, ponding and sheet overflow during storms, and eliminate open drainage ditches along portions of Appian Way and San Pablo Dam Road and throughout the community.
- 3-203. In view of the existing traffic problems and the limited ability of the circulation system to adequately handle substantial growth in traffic volumes, new development should be approved at the low to mid range of the respective single family residential land use density designations.



- 3-204. This plan calls for residential development to be directed primarily to areas where infilling of previously "passed over" property can occur, as well as to a limited number of larger parcels of undeveloped acreage. These larger parcels include the western slope of Sobrante Ridge, and the lower portions of the north face of San Pablo Ridge.
- 3-205. A major policy of this plan is to eliminate deep, narrow lots through the aggregation of land parcels in areas designated for multiple family use. Every effort should be made to encourage the aggregation of such lots to provide for better designed projects.
- 3-206. Areas outside the present and committed area of service capability of EBMUD and West Contra Costa Sanitary District are to be retained in the Open Space category.
- 3-207. In order to retain the ridgelines around El Sobrante in their natural state, it is recommended that a ridgeline preservation ordinance be developed which would prohibit the placement of any structure on or near the crest of a scenic ridge, such as San Pablo Ridge or Sobrante Ridge. All land above the 400' elevation shall not be developed for suburban purposes unless in conformance with the Land Use Plan Map.

#### POLICIES FOR THE NORTH RICHMOND AREA

- 3-208. The plan for North Richmond designates housing in the Single Family Residential-High Density category (5 to 6.9 units per net acre), which also allows duplexes. A significant vacant area west of Third Street, between the two creeks, is also designated for single family homes and could result in more than a doubling of population in the area if it is developed in residential uses. The 10 acre parcel located north of Gertrude and east of the Richmond parkway shall be developed for single family homes as a Planned Unit Development and shall have a maximum unit count of 62 homes.
- 3-209. For all industrial categories, the Plan should accommodate and guide the growth and development of industry. With growth and development there needs to be a recognition of environmental, social and economic values which will work to minimize land use conflicts, to establish a reasonably pleasing setting and to protect natural resources that are irreplaceable. Through appropriate regulatory mechanisms (e.g., zoning ordinance, nuisance ordinance, etc.) provide for the following:
  - Require a setback from San Pablo and Wildcat Creeks for new structures. The size of the setback will be developed through site development review in conjunction with responsible agencies (e.g., Department of Fish and Game, Flood Control District). Lands within these setback areas shall reinforce the habitat values and/or trail setting of the adjacent flood control project for these creeks.
  - Require setbacks within shoreline areas to protect wetlands designated by State or Federal regulatory agencies and to provide public access as appropriate. The size of the setback or mitigation will be developed in conjunction with all affected agencies.
  - Require health risks assessments and, where appropriate, provide necessary buffers for all new applications handling substantial amounts of hazardous materials.
  - Achieve an upgrading of the visual appearance and unity of the area through architectural and landscape requirements and utility undergrounding.

- Require special geotechnical studies and construction techniques in areas of potential seismic or geological hazards (e.g., Alquist-Priolo Special Study Zone, high liquefaction, and reclaimed wetland areas).
- Use established standards to limit activities that may endanger human health and can cause damage to the environment.
- Use established standards to limit activities which may be objectionable such as odors, fumes or other emissions so they will be contained within the property boundaries.
- Require projects adjacent to parks or recreational corridors to minimize impacts on the recreational values of those facilities.
- Require a shadow analysis for projects adjacent to commercial nurseries and protect the solar access of affected properties.
- Require archaeology reconnaissance surveys for all projects within an archaeological sensitivity area. When cultural resources are located within a project, measures to deal with the historic resource shall be recommended by a qualified archeologist.
- Require all uses to comply with the regulations of the Bay Area Air Quality Management District, the Regional Water Quality Control Board, the San Francisco Bay Conservation and Development Commission, the State and County health departments, and any other regulatory agencies which exist or may be established to ensure environmental quality in the San Francisco Bay Region.
- Screen all outside storage/maintenance areas from public streets.

#### 1. LIGHT INDUSTRY

Amend the "Light Industry" land use category of the General Plan Land Use Element for North Richmond to read as follows:

Industrial activities in this category are established in areas where development is carefully controlled to ensure compatibility between the industrial operations and other activities and the character of the district, community and environment in which they are located. The appearance of each site, building or industrial operation, and each industrial district as a whole, should establish a reasonably pleasing and harmonious setting.

Types of uses within this category can range from research, engineering, product development and testing, and sales development to light manufacturing, warehousing, distribution centers, and commercial nurseries. Support retail/service uses may also be found in this category.

In addition to the policies and factors established to guide development in all commercial and industrial areas, the following policies and factors are established to guide the development of Special Industrial areas:

- (1) "Apply special zoning designations or planned unit districts to provide use limitations, in cases where uses need to be limited to protect the character of an area, "in all cases where...

- (2) Limit activities which may result in noise, glare or vibrations extending beyond the property boundary."

## 2. HEAVY INDUSTRY

Amend the "Heavy Industry" land use category of the County General Plan Land Use Element for North Richmond to read as follows:

"Industry activities in this category are traditionally larger scale and include very little or no office space. Sufficient visual open space and/or landscaped screening between industrial operations and adjacent residential or recreational activities shall be required as needed."

This category accommodates a wide variety of industrial activities including, but not limited to, oil refining, contractors' storage yards, warehouses, and machine shops. For the North Richmond area, this category also includes commercial nurseries. Support retail/service uses may also be found in this category.

In addition to the policies and factors established to guide development in all commercial and industrial areas, the following policies and factors are established to guide the development of General Industrial areas:

- Encourage commercial nurseries to remain in the area.
- Require projects involving auto dismantling activities to be enclosed and prohibit outside storage of vehicles.
- Limit activities which may result in noise, glare or vibrations beyond the designated industrial areas.
- Make a finding that new residential uses within this designation are incompatible.

## 3-210. IMPLEMENTATION

The City of Richmond and the County shall undertake a rezoning study of the area to bring the zoning in conformance with their respective General Plans.

All new permits with conditions of approval shall be monitored by the County or City. Additionally, the City of Richmond and the County shall undertake a more vigorous zoning investigation and enforcement program.

The County and City shall require verification that all appropriate State and Federal or regional permits are granted before building permits are issued for the projects.

Project applicants shall provide a site history for uses that have previously been on the property as part of any permit application process. As appropriate, soils analysis for toxic wastes shall be required for permit applications.

- 3-211. A Redevelopment Plan for the North Richmond area was adopted by the Board of Supervisors in July 1987. All development proposals should be reviewed by, and coordinated with, Redevelopment Agency staff to ensure compatibility with the Redevelopment Plan. Additionally, involvement with



the redevelopment process will allow the County to coordinate concurrent development proposals and to possibly facilitate the construction of public improvements that will further the goals of the Redevelopment Plan.

- 3-212. "Lands which were the site of the West Contra Costa Sanitary Landfill ownership and which are designated as Open Space, will continue to allow solid waste facilities on the property as an interim use of the land."
- 3-213. "The West County Integrated Resource Recovery Facility site, circumscribed by Central Street, Brookside Drive, Third Street and the Wildcat Creek, is recognized as a facility of special concern for the implementation of the County's solid waste management system."
- 3-214. To implement the North Richmond Redevelopment Plan, the North Richmond Senior Housing Project shall support a senior housing facility on the block bounded by 2nd and Third Streets, and Grove and Chesley Avenues. The primary objective of this general plan amendment is to site a senior housing facility of up to 52 units. This senior housing facility is intended to be supplemented with complementary uses which include a community health clinic and a neighborhood commercial facility (up to 10,000 square feet). If a retail establishment is not secured, then that space shall be redesignated Public/Semi-public and used to support either the senior housing facility or the health clinic.
- 3-215. "The Fifth Street and Market Avenue General Plan Amendment is intended to support up to three residential units. Development of new residential units should be visually compatible with the existing residences which are just south and adjacent to this area. A density bonus is to also be considered as part of potential future development for further implementing the North Richmond Redevelopment Plan."

#### POLICIES FOR THE DOUGHERTY VALLEY

- 3-216 The Dougherty Valley is planned for development as a residential community supported by retail, office, and community services and provides in large measure open space buffers from adjacent developed areas. Protected creek corridors will be integrated within the development fabric. New development of up to 11,000 homes within the Dougherty Valley would provide a new residential community of approximately 29,000 people. The land use designations are reflected in the Land Use Element map. A Dougherty Valley Specific Plan has been developed to augment those General Plan designations. The Dougherty Valley has undergone a more comprehensive planning process, consistent with this General Plan, in the Dougherty Valley Specific Plan, which provides more detailed planning and supplemental goals, policies and implementation measure for this area. In the case of minor conflicts with Countywide non-area specific goals, those of the Specific Plan shall prevail.

#### POLICIES FOR THE GALE RANCH AREA OF DOUGHERTY VALLEY

- 3-217. The Country Club at Gale Ranch GPA area is planned for development as a residential community including up to 1,216 attached and detached residential units; a golf course; and church site. The Country Club at Gale Ranch should provide open space buffers between adjacent residential development and within the proposed new community. New parks and recreational facilities, protected creek corridors and open space uses will be integrated within the development fabric. The land use designations which are intended to achieve this new residential community are reflected in the Land Use Element map.

## Land Use

- 3-218 Within the areas designated for residential development, encourage a mixture of housing types such as attached and detached units provided these developments conform with the corresponding County General Plan land use designations.
- 3-219. Organize the Country Club at Gale Ranch area into a series of neighborhoods which are distinctive in character and shaped by the landscape.
- 3-220. The Country Club at Gale Ranch should be developed predominantly for residential use and should be supported with complementary uses such as public facilities, parks and recreational facilities and open space buffers.
- 3-221. Protect and enhance the creek corridor areas, namely the Coyote Creek corridor.
- 3-222. Structure residential neighborhoods around focal uses, such as community facilities and recreational uses to provide identity and cohesion to Country Club at Gale Ranch neighborhoods.
- 3-223. Establish public and homeowners's association-maintained recreational facilities in areas where environmental features can be enjoyed and enhanced by the recreational use.
- 3-224. Provide for a variety of public and private recreational uses that are accessible to Country Club at Gale Ranch residents and visitors.

## Housing

- 3-225. The Country Club at Gale Ranch should provide a variety of housing types and sizes to meet the diverse needs of all age groups and household sizes. The majority of homes in Country Club at Gale Ranch should be single family in character, but also be available in both detached and attached forms.
- 3-226. To implement County General Plan housing goals and policies, the Country Club at Gale Ranch will provide at least 15 percent of all units (up to 182 total units) to be affordable to households with incomes no more than 120 percent of the County median income for their household size.
- 3-227 The use of an in-lieu affordable housing fee to secure relief from the requirement to deliver affordable housing is expressly prohibited.
- 3-228 Encourage and promote owner-occupied housing, especially for affordable units. Affordable units shall be maintained for the maximum period feasible. Target periods shall be a minimum of twenty years for for-sale units and thirty years for rental units. The County is required to provide direction regarding how the required affordable units will be provided and clarify the designated income category to be considered eligible for designated affordable units at each review phase.
- 3-229. Encourage the development of innovative single-family housing which addresses housing affordability needs. Such examples include the development of carriage units which include single family detached units developed in conjunction with second dwelling units (the "carriage" unit) over a detached garage.

### Circulation and Transportation

- 3-230. Extend public transit service to provide alternative means of access to the Country Club at Gale Ranch.
- 3-231. Provide rights-of-ways for future transit needs (i.e., bus pull-outs, park 'n ride lots, express bus lines, and light rail).
- 3-232. Encourage and facilitate the use of travels modes other than the private automobile for trips from and within the Country Club at Gale Ranch.
- 3-233. Provide a park-and-ride location along the arterial street network to serve as a transit stop and meeting point for ridesharing.
- 3-234. Develop systems of safe and convenient bicycle routes, hiking and riding trails as part of the Country Club at Gale Ranch development.
- 3-235. Encourage and provide for the convenient and safe use of the bicycle as an alternative mode of travel.
- 3-236. Develop a collector roadway system for the Country Club at Gale Ranch development that can be integrated with adjacent development and supplement the arterial system while meeting the circulation needs of the Dougherty Valley.
- 3-237. Encourage telecommuting, by wiring new homes for accessing telecommunication facilities, as an alternate to the work commute for new residents of the Country Club at Gale Ranch.
- 3-238. Encourage and maximize the use of alternative travels modes by providing a public education system advising residents of commute alternative and transit opportunities available to the Country Club at Gale Ranch area.
- 3-239. Provide a broad-based Travel Demand Management program.
- 3-240. To be consistent with the Growth Management provisions of the County General Plan, the Tri-Valley Transportation Plan/Action Plan for Routes of Regional significance (Circulation Draft), is to be considered.
- 3-241. The Country Club at Gale Ranch development shall provide a project design that will accommodate efficient and convenient transit routing and maximize transit ridership; to achieve this, approximately 80 percent of the housing should be located within one quarter mile of a designated transit route.
- 3-242. The Country Club at Gale Ranch development shall provide the minimum number of parking spaces per the requirements of the American Disabilities Act and the State of California.

### Open Space and Conservation

- 3-243. Provide for an open space and trail system with extends open space corridors offering visual and physical links to the regional open space system.
- 3-244. Set aside at least 55 percent of the Country Club at Gale Ranch as parks, recreational, open space, or other non-urban lands uses.



- 3-245. Enhance the habitat value of the ridges and their potential to support a diversity of wildlife.
- 3-246. Keep the perimeter ridges of the Country Club at Gale Ranch area open and unobstructed, with minimum development for recreational use only. Areas along perimeter ridges shall be dedicated to a public agency or other open space management agency for open space and recreational purposes.
- 3-247. Establish viewshed buffer zones of a minimum of one hundred feet between the major ridgetops and the development areas.
- 3-248. Reinforce the visual prominence and wildlife value of significant creek corridors and provide for active and passive recreational uses within the Coyote Creek corridor.
- 3-249. Establish the Coyote Creek corridor system as a multipurpose linear greenway and storm water management system.
- 3-250. Stabilize the creeks within the Country Club at Gale Ranch utilizing a combination of vegetation and environmentally-sensitive stabilization techniques.

#### Public Facilities and Services

- 3-251. To the extent allowed under State law, require that new development which results as part of the Country Club at Gale Ranch GPA to fully mitigate the impact on school facilities.
- 3-252. Sanitary sewer service shall be provided by an appropriate public agency. No septic tanks or leachfields shall be allowed.
- 3-253. Ensure potable water supplies are sufficient in quality and quantity to provide for domestic consumption and fire protection.
- 3-254. Provide for the use of a reclaimed water distribution system to irrigate parks and the golf course.
- 3-255. Adequate storm drainage facilities shall be provided at the Country Club at Gale Ranch.

#### Growth Management

- 3-256. The appropriate and necessary public facilities and traffic levels-of-service to meet County standards for protecting public health, safety, and welfare shall be provided at Country Club at Gale Ranch.

#### Community Design

- 3-257. Ensure that the interface between the Country Club at Gale Ranch and nearby communities allows for logical physical transitions and that the Country Club at Gale Ranch development is integrated and respectful of surrounding open space areas.

### **POLICIES FOR THE SOUTHEASTERN CONCORD/CALIFORNIA STATE UNIVERSITY - NEWHALL RANCH PLAN AREA**

- 3-258. For those lands located adjacent to the southeasterly portion of the City of Concord, which are part of the Newhall Ranch Area Plan, compliance shall be maintained with the Newhall Ranch Area Plan as adopted by the City of Concord on July 12, 1976 or as amended by the City, in order to ensure consistency, compatibility and environmental sensitivity with the existing land use patterns along this

portion of Ygnacio Valley Road and adjacent to the California State University Campus. Development of this land shall occur through application and annexation to the City of Concord.

#### POLICIES FOR ALLIED INVESTMENT PROJECT

- 3-259. The Allied Investment Project area fronting on the east side of Camino Pablo, immediately north of Rancho Laguna Park in the Moraga area is designated Single Family Residential - Low Density. Development shall not exceed 15 dwelling units in this area.

#### POLICIES FOR THE COUNTRYWOOD PROJECT AREA.

- 3-260. The Countrywood seven acre project area between Pleasant Hill and Diablo View Roads shall be developed as Senior Citizen Congregate Care and Open Space. It shall be developed through the Planned Unit Development process. The Senior Citizen Congregate Care area allows for the development of clustered residential units for the location of a senior citizen congregate care housing project. If senior housing is not constructed, the property will be limited to single family homes as allowed by the pre-existing Single Family Residential - Low Density category.
- 3-261. The Open Space area is heavily vegetated and shall be protected as a natural reserve allowing for only trail facilities or compatible open space uses. Development rights for the entire area shall be deeded to the County as a condition of development approval.
- 3-262. This plan amendment covers two separate parcels and both parcels are to be for Congregate Care use. Review of development application shall determine the appropriate number of units allowed on the site. The smaller half acre site is too small for congregate uses without combination with the larger parcel and will be limited to single family residential uses.

#### POLICES FOR DISCOVERY BAY AREA

- 3-263. Development applications on the Albers project located on the northeast corner of Bixler Road and State Route 4 will be allowed upon assurances of needed public facilities. Development applications will need to consider mechanisms for buffering the subject property from ranchettes to the north of the site. The area previously designated commercial and now shown for Multiple Family Residential Low Density is intended to accommodate up to 97 residential units. Development applications within the general plan amendment area will be approved only upon assurances, through project conditions of approval, to the extent allowable under State law, that all needed public facilities, including school facilities, can be provided. The applicant will pay appropriate school mitigation fees based on an adequate and approved school facilities plan. The Byron Union School District will initiate the process to prepare its school facilities plan in a timely manner.
- 3-264. The policy for review of the Discovery Bay West project are as follows:

##### Conservation and Open Space

- a. The Discovery Bay West project shall provide open space as part of the land use concept to ensure compliance with the County's 65/35 Land Preservation Standard. For this purpose, the project shall include dedication of development rights to the 200± acre Fallman Ranch in the northeast portion of the GPA area. Additionally, it shall provide a minimum of 120 acres of open forms of land use within the project, including but not limited to, lakes, park, utility easement, Fallman Canal, wetland (in southeast portion of project), pocket parks, landscaped areas, and trails.

- b. The development concept of the Discovery Bay West project shall provide improved functional integration between the water element, other parks and recreation facilities and the residential project. Public access to areas east should be explored.
- c. The Discovery Bay West project shall provide a buffer of at least 100 feet in width, between the residential lots and the center line of Bixler Road for the portion of the site north of the East Contra Costa Irrigation District (ECCID) Canal.
- d. Jurisdictional wetland areas planned for open space uses shall have development rights for these areas dedicated to the County prior to construction of any portion of the project that is north of the ECCID Canal.

#### Land Use

- e. The land use plan map for Discovery Bay West should be interpreted flexibly in terms of the location and configuration of the lakes and marina.
- f. A maximum of 2,000 dwelling units shall be allowed within the Discovery Bay West project area.
- g. A community center shall be provided as part of the Discovery Bay West project. The location of the community center shall be in the Discovery Bay West GPA area of the existing community of Discovery Bay. The Hofmann Company is to dedicate the site, preferably in the existing Discovery Bay Community, and to pay 50 percent of the building construction costs. Site selection shall be determined by the County, Discovery Bay MAC and developer of Discovery Bay West.
- h. The Discovery Bay West project shall be designed as a mixed density residential project which shall include both attached and detached units in differing density to serve a broader range of housing needs. Property generally east of the lakes is to be designated Single Family Residential-Medium Density. The remaining residential lands are to be designated Single Family Residential-High Density. The design shall allow for internal project amenities such as recreational areas, community focal points and the like. Senior housing projects shall be encouraged.
- i. Establishment of a senior housing project in the vicinity of Point of Timber Road shall be encouraged.

#### Public Services

- j. The Discovery Bay West project shall consider alternative water systems for the provision of domestic water, including preparation of a formal contingency plan for use of surface waters.
- k. The Discovery Bay West project shall include provision for a ground water monitoring program to quantify the effect of additional use of the aquifer (i.e., quality or drawdown). If the monitoring programs show that the performance standards are not being met, no new units may be added.



- l. The developer of Discovery Bay West along with representative of the Byron and Knightsen Elementary School Districts shall meet to resolve issues pertaining to school district boundaries.

#### Transportation

- m. Discovery Bay west shall remain in the East County Regional Area of Benefit.
- n. Discovery Bay West shall pay the Eastern Contra Costa Subregional Transportation Mitigation Fee in effect at the time building permits are issued.
- o. Discovery Bay West shall participate in a flexible implementation program for mitigation measures in the Environmental Impact Report.
- p. After issuance of the 500th building permit for the Discovery Bay project, the Discovery Bay West developer shall fund a traffic study to determine if the trip distribution and road network assumptions in the EIR have substantially changed. If substantial changes have occurred, mitigation and possibly subsequent environmental documentation will be required. The cost of the additional traffic studies and environmental documentation will be the responsibility of the developer. Additional traffic mitigation will be subject to the requirements of a flexible monitoring program.
- q. The circulation and transportation concept shall provide a road connection to the Discovery Bay community in the southern portion of the GPA area.
- r. The Discovery Bay West project shall be reviewed to consider adequate access and internal circulation to adjacent properties within the plan amendment area.
- s. The Discovery Bay West project shall provide emergency vehicle access near the northwest corner of the Pantages property.
- t. Discovery Bay West GPA projects shall provide an efficient internal circulation system, with adequate on-street parking.
- u. To reduce vehicle trip generation, consideration should be given to establishing a small scale telecommuting center in the community center. Equipping residential units with telecommunication capabilities should be encouraged.

#### POLICIES FOR ESTABLISHMENT OF COUNTY HOMELESS SHELTERS

- 3-265. Background information on homelessness is also discussed in Section 6.6 of Chapter 6, the Housing Element. Beginning on Page 6-61 of the Housing Element of this general plan, and specifically in Table 6-15 on page 6-62, non-county homeless shelters are discussed. The Housing Element discussion does not apply to County homeless shelters.

The purpose of the following policies is to designate where County homeless shelters may be established and under what circumstances. Other policies that address homelessness are contained in the Public Facilities/Services Element.

- 3-266. County homeless shelters may be established in all general plan land use designations (including residential, commercial and industrial, mixed use areas, and other uses), except for Congregate

Care/Senior Housing, Landfill, and all Open Space (including Agricultural Lands, parks and Recreation, Agricultural Core, Delta Recreation and Resources, Water, and Watershed) designations. County homeless shelters may be established within areas that lie in incorporated or unincorporated areas.

- 3-267. A County homeless shelter may be established as set forth above, provided that the Board of Supervisors is satisfied that the shelter:
- (a) has undergone applicable environmental review;
  - (b) will furnish residents with sleeping quarters, food, and access to bathroom facilities and transportation services if necessary or advisable while they are housed at the shelter;
  - (c) will include appropriate and adequate security measures and on-site supervision;
  - (d) will provide a procedure for the receipt and consideration of neighbors' concerns;
  - (e) will benefit the health, safety and welfare of shelter residents; and
  - (f) will not prevent the implementation of General Plan land uses in the vicinity.

### 3.9 POLICIES FOR SPECIAL CONCERN AREAS

Three areas have been designated Special Concern Areas in view of their key locational qualities. These areas are the Appian Way corridor (Figure 3-5), the San Pablo Dam Road commercial area (Figure 3-6), and San Pablo Ridge (Figure 3-7). Each of these areas is discussed below in detail.

#### POLICIES FOR APPIAN WAY CORRIDOR

- 3-268. The Appian Way Corridor Special Concern Area is to develop into a unified, well-designed neighborhood rather than an incremental accumulation of unrelated developments.
- (a) adhere to the adopted Appian Way Precise Plan, which provides for a standard of an 84 foot right-of-way. Develop continuous sidewalks and a bicycle path separated from automobile traffic, but designed within the right-of-way;
  - (b) where possible, retain existing mature trees located either within or encroaching into the potential right-of-way, and incorporate them into the overall roadway design;
  - (c) provide appropriate traffic signalization as new development occurs along the corridor, with each development required to pay an appropriate share of the cost;
  - (d) eliminate the hazardous ditches along Appian Way by installing appropriate storm drains as a part of right-of-way improvements;
  - (e) project design should reflect the objective of providing well-designed development suited to the building sites, at appropriate densities;
  - (f) commercial areas should maintain a low profile by limiting building height to 35 feet;

- (g) emphasis should be on landscaping and architectural continuity along Appian Way, with building masses de-emphasized;
- (h) variances to parking standards shall not be granted;
- (i) design of buildings shall be interesting and innovative, but should have a harmonious relationship with each other;
- (j) consolidation of parcels shall be encouraged with emphasis on combined access and parking areas;
- (k) variation in building set-back from Appian Way and along sideyards should be encouraged to create openness along the corridor;
- (l) provide an attractive streetscape through street tree and frontage planting and encourage the use of drought-resistant plants;
- (m) areas designated for commercial uses should be rezoned from Retail Business District (R-B) to Neighborhood Business District (N-B), which zone reflects the desired commercial character along Appian Way. Multiple family development shall not be allowed by land use permit in these areas;
- (n) rezone areas designated from multiple family residential use to M-12, except that current zoning may be retained where development already exists;
- (o) a landscaped buffer zone, including attractive fences wherever necessary to provide privacy and security shall be provided between new developments and existing residences;
- (p) within areas designated for development in the Appian Way Special Concern Area there are those areas which, because of topography, steep slopes or aesthetic qualities, are unsuitable for development and which shall be protected as open space whenever feasible; and
- (q) each individual multi-family development shall provide recreational facilities for its occupants.

#### POLICIES FOR SAN PABLO DAM ROAD

3-269. The San Pablo Dam Road Special Concern Area is the primary business district for El Sobrante. The El Sobrante Community desires to retain its identity and individuality in the face of urbanization pressures. Two distinct, yet interlocking problems must be addressed: 1) devising a circulation system which allows traffic into, through, and around the business district, and 2) effective land use and design policies for the area.

- (a) The commercial area shall be made attractive and convenient to the community with emphasis on the following:
  - o improved localized traffic circulation;
  - o adequate parking; and
  - o diversion of non-shopper traffic by development of an alternative roadway.

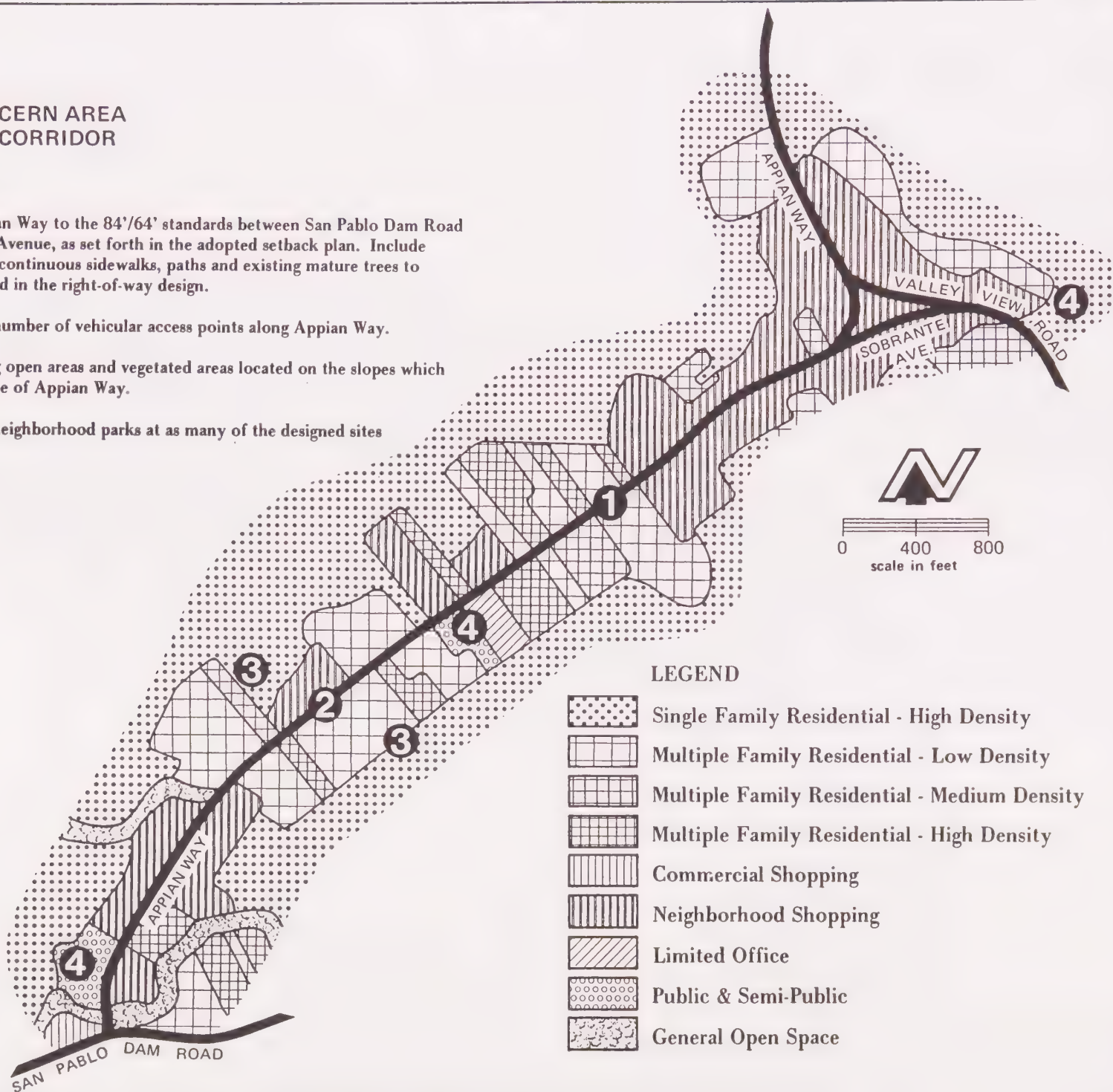


- (b) Encourage commercial area rehabilitation and redevelopment, considering development of a unifying motif.
- (c) Commercial expansion shall be directed away from San Pablo Dam Road frontage to create a deeper and more appropriately shaped commercial district.
- (d) Improve overall area appearance through appropriate sign regulation. This would eventually result in removal of unsightly signs.
- (e) Provide adequate off-street parking, and secure the right-of-way for an alternate traffic route.
- (f) Enhance pedestrian traffic across San Pablo Dam Road by well marked and signalized crosswalks.
- (g) Develop commercial sites and parking areas contiguous to existing development, conforming to the Plan map. Extend such uses only as far south as the proposed location of the new parallel arterial. Do not permit non-contiguous conversion of existing residential uses to commercial use.

## SPECIAL CONCERN AREA APPIAN WAY CORRIDOR

### CONCEPTS

- ① Develop Appian Way to the 84'/64' standards between San Pablo Dam Road and Sobrante Avenue, as set forth in the adopted setback plan. Include provisions for continuous sidewalks, paths and existing mature trees to be incorporated in the right-of-way design.
- ② Minimize the number of vehicular access points along Appian Way.
- ③ Retain existing open areas and vegetated areas located on the slopes which flank either side of Appian Way.
- ④ Provide small neighborhood parks at as many of the designed sites as feasible.



### LEGEND

|  |  |
|--|--|
|  | Single Family Residential - High Density     |
|  | Multiple Family Residential - Low Density    |
|  | Multiple Family Residential - Medium Density |
|  | Multiple Family Residential - High Density   |
|  | Commercial Shopping                          |
|  | Neighborhood Shopping                        |
|  | Limited Office                               |
|  | Public & Semi-Public                         |
|  | General Open Space                           |

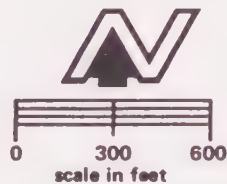
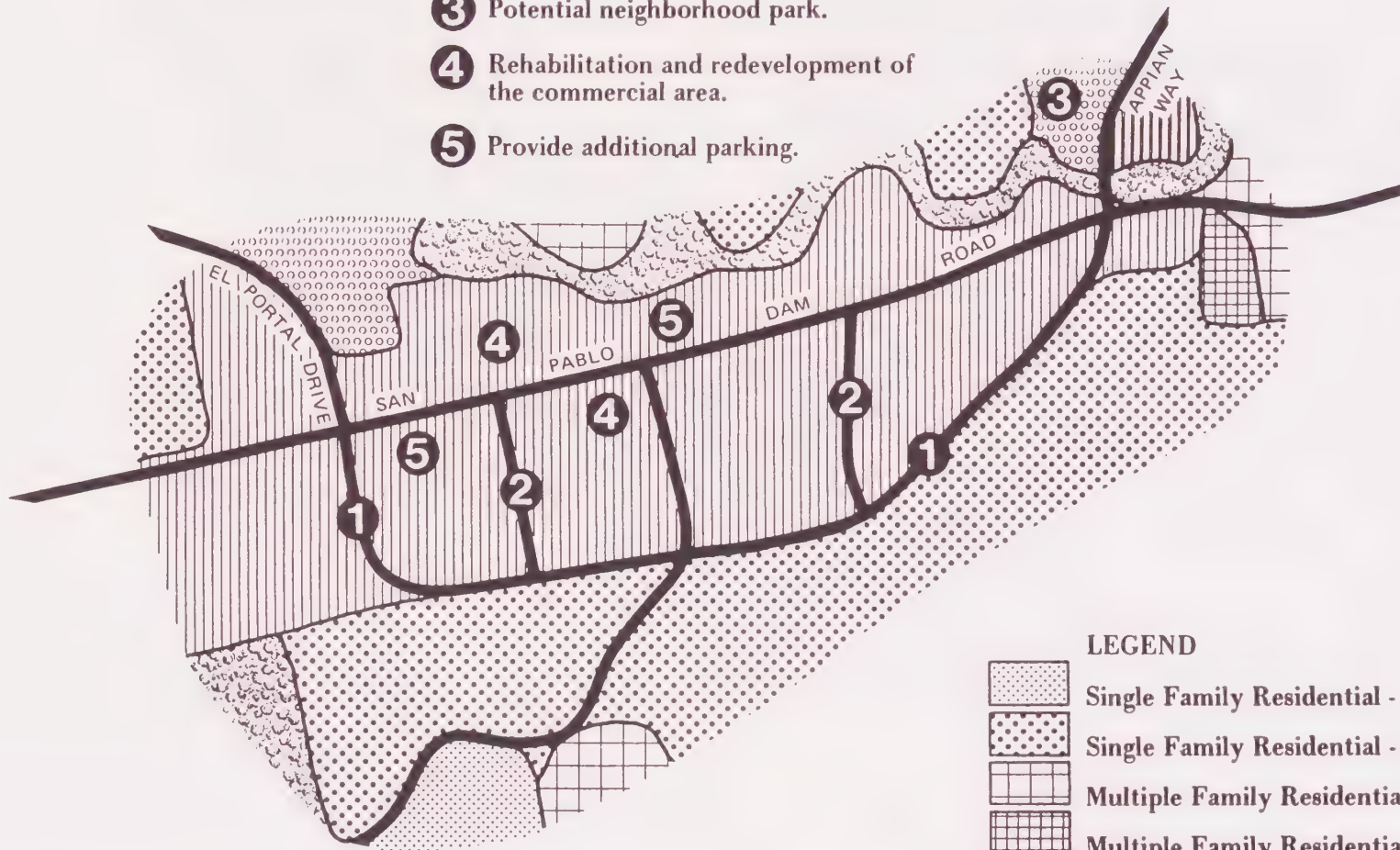
Figure 3-5

Appian Way Corridor Special Concern Area

**SAN PABLO DAM ROAD COMMERCIAL  
SPECIAL CONCERN AREA**

**CONCEPTS**

- 1** Proposed major arterial.
- 2** Provide additional collector streets.
- 3** Potential neighborhood park.
- 4** Rehabilitation and redevelopment of the commercial area.
- 5** Provide additional parking.



**LEGEND**

- Single Family Residential - Low Density
- Single Family Residential - High Density
- Multiple Family Residential - Low Density
- Multiple Family Residential - High Density
- Commercial Shopping
- Neighborhood Shopping
- Public & Semi-Public
- General Open Space

Figure 3-6

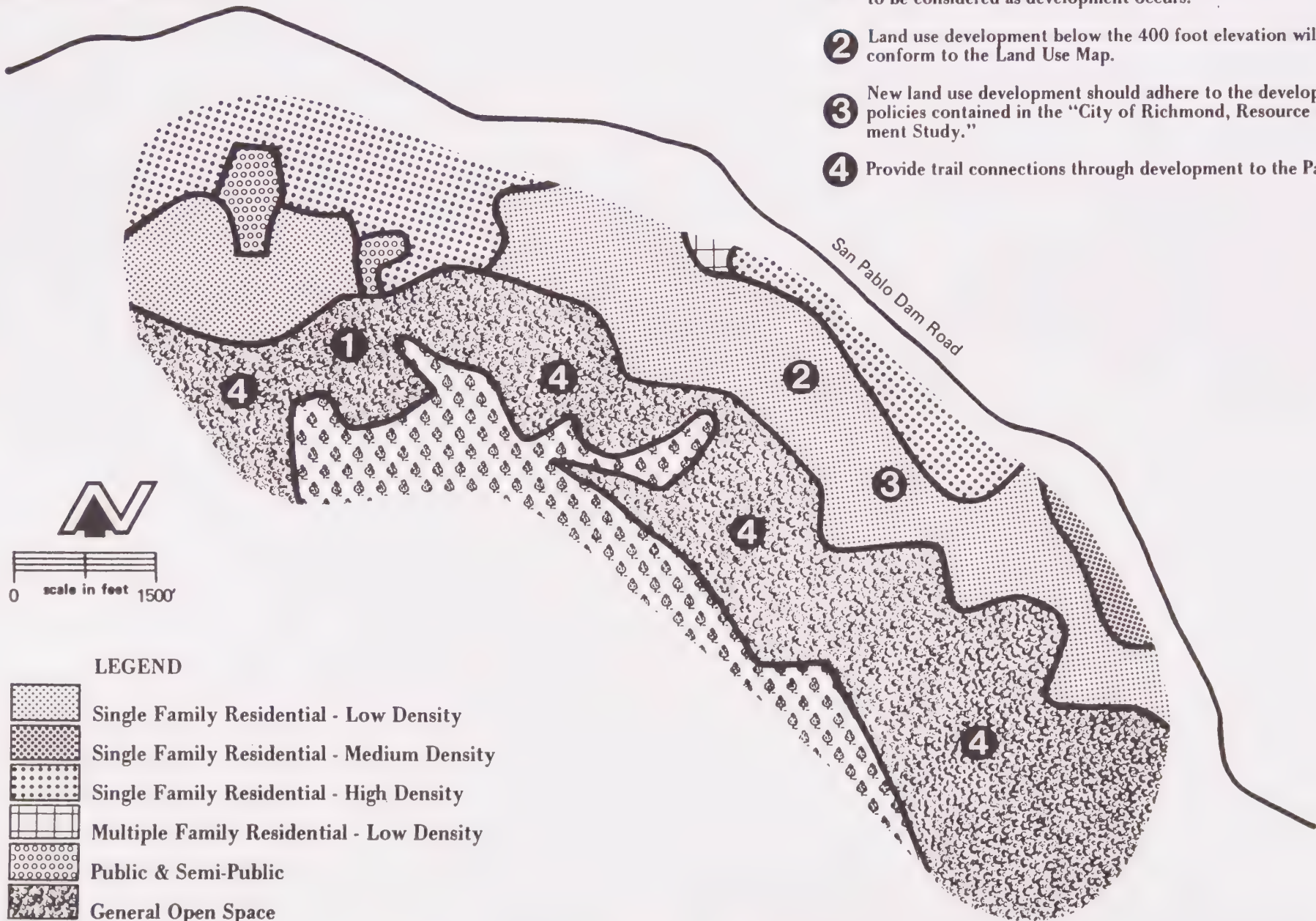
San Pablo Dam Road Commercial Special Concern Area



# **SAN PABLO RIDGE SPECIAL CONCERN AREA**

## **CONCEPTS**

- 1** Retain the area generally above the 400 foot elevation as Open Space with dedication of that land to EBRPD to be considered as development occurs.
- 2** Land use development below the 400 foot elevation will conform to the Land Use Map.
- 3** New land use development should adhere to the development policies contained in the "City of Richmond, Resource Management Study."
- 4** Provide trail connections through development to the Park.



## **LEGEND**

|  |  |
|--|--|
|  | Single Family Residential - Low Density    |
|  | Single Family Residential - Medium Density |
|  | Single Family Residential - High Density   |
|  | Multiple Family Residential - Low Density  |
|  | Public & Semi-Public                       |
|  | General Open Space                         |
|  | Parks & Recreation                         |

## POLICIES FOR SAN PABLO RIDGE

3-270. The San Pablo Ridge Special Concern Area consists of approximately 1,000 acres on the southerly borders of the Planning Area. It includes a large portion of San Pablo Ridge, with its heavily vegetated slopes, and an area below of lesser slopes near San Pablo Dam Road. The ridge provides an important visual reference to the El Sobrante Community and is a logical greenbelt border to the Planning Area.

The following policies should be applied to development in this Special Concern Area:

- (a) The granting of development rights to the public or the dedication of land to public agencies should be required of developers for all projects proposed on lands at and above the 400 foot elevation level, as conditions of approval.
- (b) No buildings should be constructed along scenic ridgelines, including areas where the ridgeline is located below the 400 foot elevation level.
- (c) Existing trail head parking and trail access to Wildcat Canyon Park should be kept open for the community. Additional trail access and parking for cars and horse trailers should be added as new developments occur.
- (d) The City of Richmond and the County should coordinate their planning efforts to preserve views of San Pablo Ridge from the community.
- (e) Existing means of access to Wildcat Canyon Park should be maintained and expanded as development occurs.
- (f) All "significant natural features" including, but not limited to, trees and native plants, natural water ways, rock out-croppings and areas of historical and archaeological significance, within the immediate vicinity of the ridgeline shall be preserved.
- (g) A landscaped buffer zone, including attractive fences wherever necessary to provide privacy and security, should be provided between new developments and existing residences.
- (h) Local civic groups should study the creation of a special assessment district to purchase San Pablo Ridge or develop the appropriate mechanisms in order to retain the ridge as permanent open space.







## **4. GROWTH MANAGEMENT ELEMENT**

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| 4.3 TRAFFIC SERVICE STANDARDS AND FACILITIES STANDARDS | 4-3         |
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## **4. GROWTH MANAGEMENT PROGRAM**

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### **4.1 INTRODUCTION**

The purpose of this Element is to establish policies and standards for traffic levels of service and performance standards for fire, police, parks, sanitary facilities, water and flood control to ensure generally that public facilities consistent with adopted standards are provided. By including this Element in the adoption of the General Plan, the County intends to establish a long range program which will match the demand for public facilities to serve new development with plans, capital improvement programs and development impact mitigation programs. The intent is to ensure that growth takes place in a manner that will ensure protection of the health, safety and welfare of both existing and future residents of Contra Costa County.

The responsible management of growth in the County is key to preserving the quality of life for current and future County residents.

This Growth Management Element is the culmination of a process which was created by the Mayors' Conference and the County Board of Supervisors. The Contra Costa Transportation Partnership Commission was established as a Transportation Authority under State law (PUC Section 180000) to provide a forum for transportation issues in the County and to propose ways to reduce traffic congestion. The Commission was established as the Transportation Authority under State law to develop a Countywide Comprehensive Transportation Plan.

The Transportation Authority, recognizing the difficulty of obtaining sufficient State and Federal monies to meet the County's transportation needs, initiated Measure C - 1988, approved by the voters, which added one-half cent to the County sales tax to be used for transportation funding. In order to receive local street maintenance and improvement funds under Measure C, the County must develop a Growth Management Element as part of its General Plan.

This Growth Management Element complies with the model element developed by the Transportation Authority and includes the sections required by Measure C - 1988 to be part of this Growth Management Element. These sections (1) adopt traffic levels of service standards (LOS) keyed to types of land use, and (2) adopt performance standards maintained through capital projects for fire, police, parks, sanitary facilities, water and flood control. The Transportation Authority for the County recognizes that facilities standards, as are discussed in this Element, establish performance standards to be applied in the County's development review process.

In addition to adopting this Growth Management Element as part of the General Plan under Measure C - 1988, the voters of the County, in Measure C - 1990, reaffirmed that growth management should be an integral part of this General Plan.

This Element is also adopted pursuant to the authority granted to local jurisdictions by Section 65303 of the Government Code of the State of California, which states:

"The General Plan may include any other elements or address any other subjects which, in the judgement of the legislative body, relates to the physical development of the county or city."

#### **4.2 RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS**

As indicated in Section 3, Land Use Element, the Growth Management Element works closely in conjunction with the Land Use Element to ensure that development proceeds in a manner which will not negatively affect facility and traffic service standards for existing land uses. In this regard, it should be noted that developments which cannot satisfy the assurances required by these standards should not be approved. By utilizing this Growth Management Element to responsibly manage new development proposals, the County will ensure that new development projects will bear their appropriate share of the adverse burdens and impacts they impose on public facilities and services. As a result, the Growth Management Element must be carefully considered together with Land Use and other elements of this General Plan when assessing General Plan consistency. The timing of the potential physical development contemplated in the Land Use Element will in part be determined by the ability of developers to satisfy the policies and standards described in this Growth Management Element. The Urban Limit Line (ULL) and the 65/35 Land Preservation Standard also work together with the Growth Management Element to ensure that growth occurs in a responsible manner and strikes appropriate balances between many competing values and interests.

In addition, this Growth Management Element contains implementing programs which encourage new development to facilitate the attainment of the goals and objectives of the Conservation Element; the Public Facilities and Services Element; and the Housing Element. Moreover, by establishing an interjurisdictional monitoring program, the Growth Management Element coordinates the implementation of the County General Plan with those of the 18 cities in the County.

To carry out the goals and objectives of the Land Use and Circulation Elements of the Plan, new development must demonstrate that the level of service standards of the Growth Management Element will be met. Only in this way will the negative effects of such growth be avoided. While it is anticipated that new growth will be able to mitigate its potential impacts through development fees and other exactions, it is possible that the timing of project approvals may be affected by the inability of individual developments to carry its appropriate cost of full service increments needed to allow further growth in a given area of the County. Thus, the improvements needed to implement the Circulation and Public Facilities and Services Elements of the Plan will in part be directly tied to, and dependent upon, the implementation of the Growth Management Element. Similarly, implementation of the Land Use Element will only proceed when it can be demonstrated that the growth management standards can be met by new development.

Policies relating to this "Pay as you Grow" philosophy underpinning the Growth Management Element can be found in the Transportation and Circulation Element, Overall Transportation/Circulation Goals 5-E and 5-F, and in the Overall Transportation/Circulation Policies 5-1 through 5-4. Related Land Use Element Goals 3-F and 3-H and Land Use Policies 3-5 through 3-10 are also part of the policy framework which underlies the Growth Management Element, and are integrally related to it. In a similar fashion, each of the required growth management performance standards included in this Element is also included in the Public Facilities and Services Element under the applicable goals and policies listed for sewers, water, police, fire, parks and flood control.

#### **4.3 TRAFFIC SERVICE STANDARDS AND FACILITIES STANDARDS**

The basic unit of measurement of performance of an intersection or roadway segment is called a Level of Service (LOS). LOS is a measure of the ratio of the volume to capacity of a roadway or intersection and is expressed as a letter A through F. In general LOS A describes free flowing conditions, and F describes very congested conditions, with long delays. Routes of Regional Significance are those roadways which carry significant volumes of through traffic, which neither begins nor ends within the affected jurisdiction. They generally include Interstate Freeways and State Highways, as well as local roads which, due to their location



between job and housing centers, carry significant volumes of intra-county trips. All other roadways included in the circulation network of the general plan are referred to in the Growth Management Element as Basic Routes. Basic routes, and their signalized intersections, are those to which LOS standards are applied in determining whether proposed projects may be approved. The methodology used in determining if projects exceed allowable LOS standards is the Circular 212 Method with Operation Method Capacities.

At present, most Basic Routes in the unincorporated area operate at or better than the LOS Standards specified in the Growth Management Element. Routes of Regional Significance are generally below these standards, however, reflecting the fact that the trips are not dependent upon land uses in unincorporated Contra Costa County, but are cumulative with traffic generated by land uses located outside of the unincorporated areas. Public Protection Facility standards contained in this plan are based upon the 1990 facilities to unincorporated population ratio. In the area of parks, for example, the current unincorporated population to park acreage yields a ratio of less than 1 acre per 1,000 persons. While certain developed areas of the County experience flooding in the event of the 100-year flood, the County Ordinance Code collect-and-convey requirements are applied to all new developments. Water and sewer services are generally adequate for existing development.

For the purposes of establishing a Public Protection Facility standard, several factors must be considered. Firstly, the unincorporated community of Kensington has established a Community Services District which provides the full range of police services in the area, and the Sheriff does not service this area. Secondly, the California Highway Patrol is responsible for enforcement of the Vehicle Code on highways and County roads throughout the unincorporated area. Thirdly, certain economies of scale enable the Sheriff to provide patrol and investigation services in physical facilities substantially smaller than a comparable series of cities would require, due to centralized administrative services, crime lab facilities and other similar functions which numerous cities would duplicate in each location. According to the Department, very little time is spent by deputies in the stations; nearly all is spent in the vehicles on patrol; no clericals are housed in the stations. In addition, the Sheriff also provides coroner services, incarceration and criminalistics services. For these reasons, direct comparisons between County facilities standards and standards that may be adopted by cities in the County are not advised, since such comparisons would be highly misleading.

The computation of a Sheriff facility standard in this General Plan includes only patrol and investigation services, adjusted for a marginal increase in centralized administrative services. As of January, 1991, the County provides approximately 155 square feet of floor area per thousand population in six locations throughout the County.

It should be noted that implementation of the goals of this Plan's various elements depends not only upon the County's administration of the Growth Management Program described below, but upon the interplay of several levels of government. Federal and State funding for improvements to basic routes will be required to attain and maintain traffic levels of service at designated levels. Finally, the County, the 18 cities, the Contra Costa County Transportation Authority, the Bay Area Rapid Transit District, and the California Department of Transportation will all have to work cooperatively in order to mitigate the negative impacts of growth upon the regional transportation system to achieve the levels of population, housing and jobs anticipated by this Plan.

#### **4.4 GOALS, POLICIES AND IMPLEMENTATION MEASURES**

##### **GOALS**

- 4-A. To provide for the levels of growth and development depicted in the Land Use Element, while preserving and extending the quality of life through the provision of public facilities and ensuring traffic levels of services necessary to protect the public health, safety and welfare.
- 4-B. To establish a cooperative interjurisdictional growth monitoring and decision making process in which each jurisdiction can share in the beneficial aspects of new growth, and avoid its potential negative effects.

##### **POLICIES**

- 4-1. New development shall not be approved in unincorporated areas unless the applicant can provide the infrastructure which meets the traffic level of service and performance standards outlined in Policy 4-3, or a funding mechanism has been established which will provide the infrastructure to meet the standards or as is stated in other portions of this Growth Management Element.
- 4-2. If it cannot be demonstrated prior to project approval that levels of service will be met per Policy 4-1, development will be temporarily deferred until the standards can be met or assured. Projects which do not, or will not, meet the standards shall be scheduled for hearing before the appropriate hearing body with a staff recommendation for denial, on the grounds that the project is inconsistent with the goals, policies, and objectives of the Growth Management Element of the County General Plan.
- 4-3. Table 4-1 shows the performance standards which shall apply to development projects. In the event that a signalized intersection on a Basic Route exceeds the applicable level of service standard, the County may approve projects if the County can establish appropriate mitigation measures, or determine that the intersection or portion of roadway is subject to a finding of special circumstances, or is a route of regional significance, consistent with those findings and/or action plans adopted by the Contra Costa Transportation Authority pursuant to Measure C - 1988. Mitigation measures specified in the action plans shall be applied to all projects which would create significant impacts on such regional routes, as defined by the Authority in consultation with local agencies and as permitted by law. For the purpose of reporting to the Contra Costa Transportation Authority in compliance with the Growth Management Program, a list of intersections that will be reported on basic routes will be prepared and maintained by the Community Development Department.

- 4.4. The County shall institute an ongoing growth management program process, as generally depicted in Figure 4-1.
- 4.5. For the purpose of applying the Traffic Level of Service standards consistent with Measure C – 1988 only, unincorporated areas subject to the growth management standards of this Element shall be characterized as Central Business District, Urban, Suburban, Semi-rural and Rural as depicted in Figure 4-2.
- 4.6. Conformity with the growth management standards will be analyzed for all development projects such as, subdivision maps, or land use permits. A general plan amendment is a long range planning tool and is not to be considered a development project or a project approval under the growth management program.

#### Traffic

LOS Standards will be considered to be met if:

- o measurement of actual conditions at the intersection indicates that operations are equivalent to or better than those specified in the standard; or
- o the County has included projects in its adopted capital improvements program which, when constructed, will result in operations equal to or better than the standard.



---

TABLE 4-1  
GROWTH MANAGEMENT  
PERFORMANCE STANDARDS

Traffic Levels of Service Keyed to Land Use Type

|                                      |   |
|--------------------------------------|---|
| Rural Areas:                         | Peak Hour Level of Service of low C<br>(Volume/Capacity Ratio = .70-.74)  |
| Semi-Rural Areas:                    | Peak Hour Level of Service of high C<br>(Volume/Capacity Ratio = .74-.79) |
| Suburban Areas:                      | Peak Hour Level of Service of low D<br>(Volume/Capacity Ratio = .80-.84)  |
| Urban Areas:                         | Peak Hour Level of Service of high D<br>(Volume/Capacity Ratio = .85-.89) |
| Central Business<br>Districts (CBD): | Peak Hour Level of Service of low E<br>(Volume/Capacity Ratio = .90-.94)  |

---

Note: These terms are used solely with reference to the Growth Management Element performance standards.

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---

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| Semi-Rural Areas:                    | Peak Hour Level of Service of high C<br>(Volume/Capacity Ratio = .74-.79) |
| Suburban Areas:                      | Peak Hour Level of Service of low D<br>(Volume/Capacity Ratio = .80-.84)  |
| Urban Areas:                         | Peak Hour Level of Service of high D<br>(Volume/Capacity Ratio = .85-.89) |
| Central Business<br>Districts (CBD): | Peak Hour Level of Service of low E<br>(Volume/Capacity Ratio = .90-.94)  |

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Note: These terms are used solely with reference to the Growth Management Element performance standards.

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Figure 4-1

Flow Chart of Growth Management Process

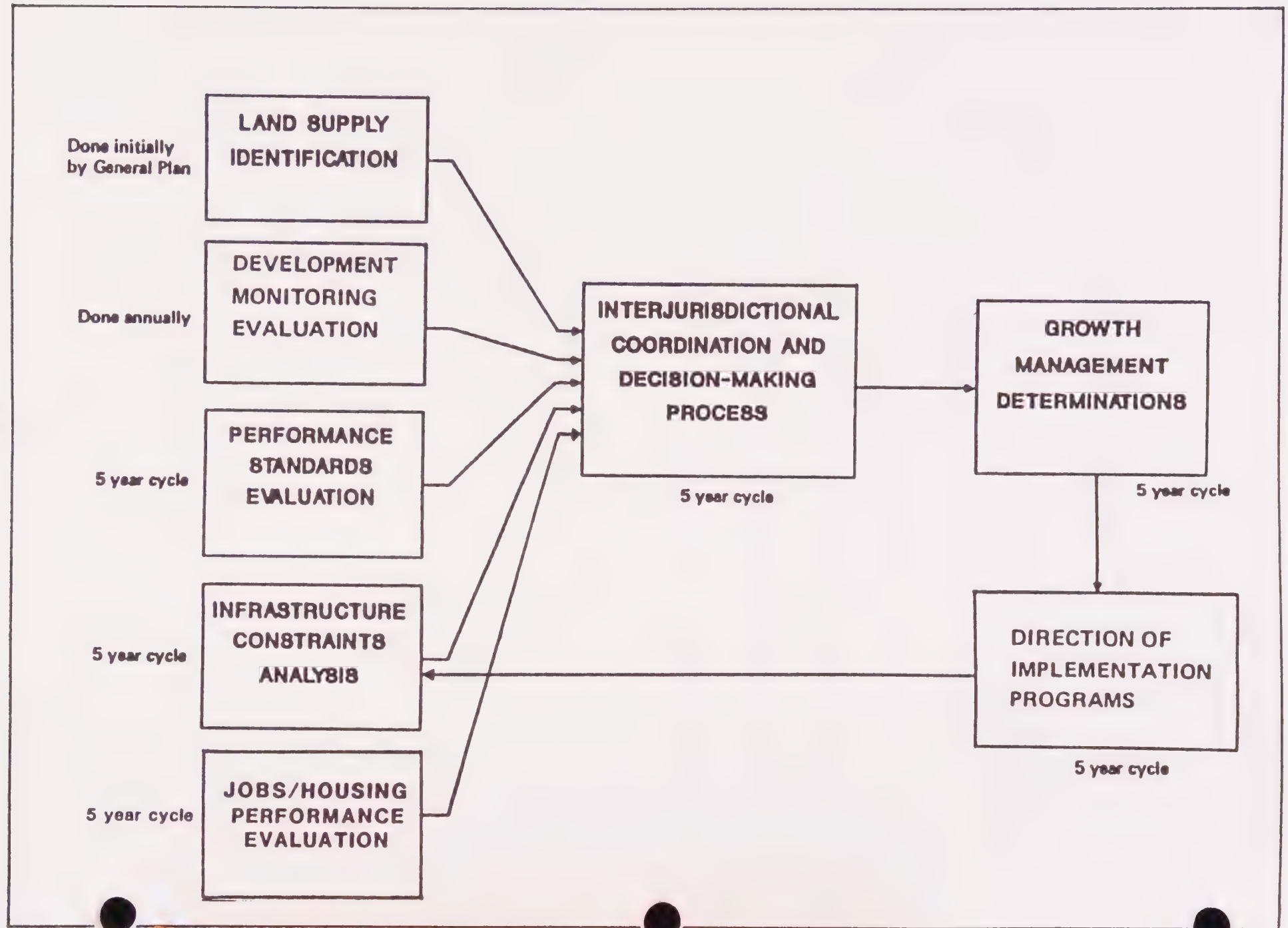
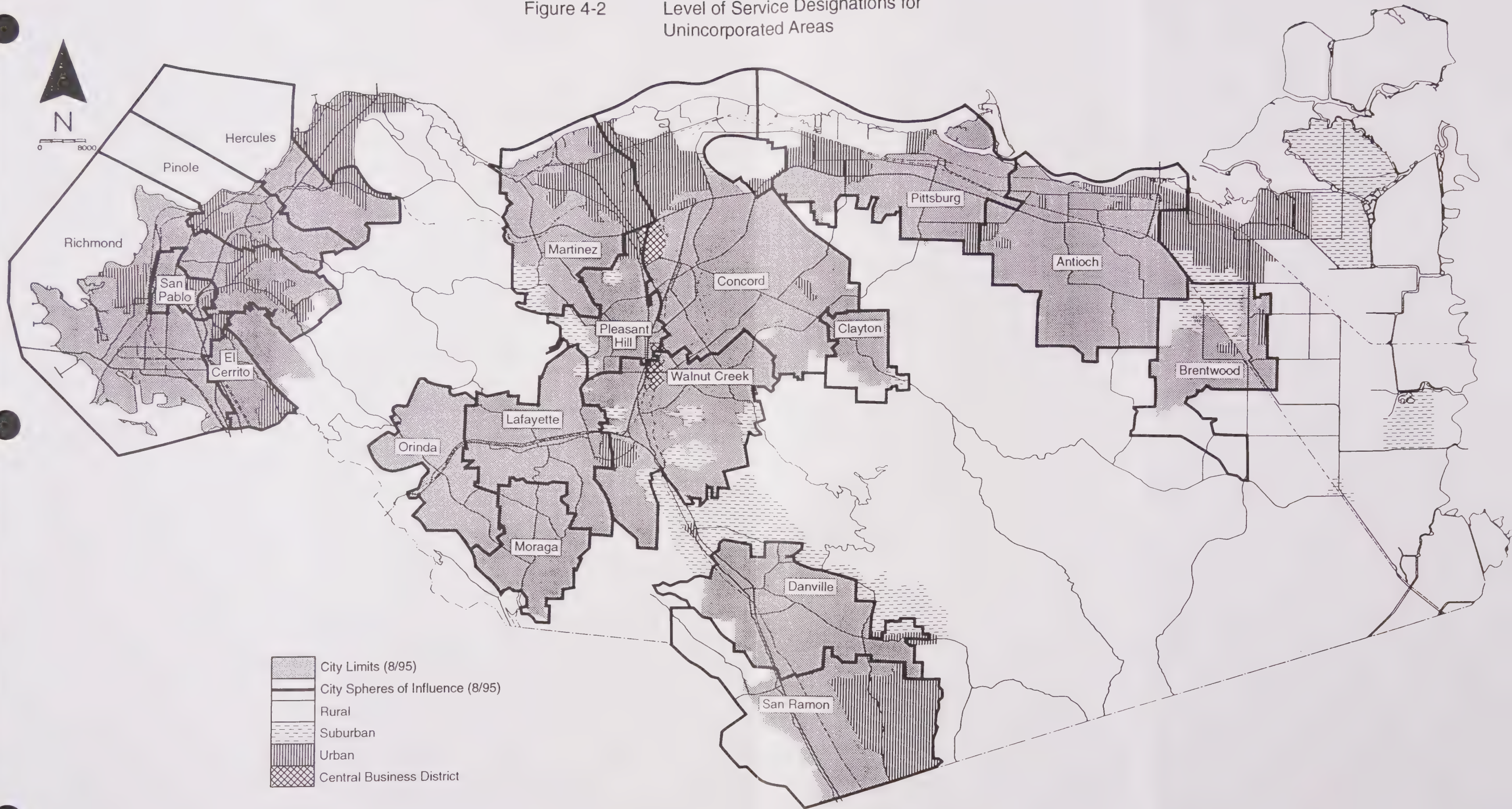


Figure 4-2 Level of Service Designations for Unincorporated Areas









### Water

The County, pursuant to its police power and as the proper governmental entity responsible for directly regulating land use density or intensity, property development and the subdivision of property within the unincorporated areas of the County, shall require new development to demonstrate that adequate water quantity and quality can be provided. At the project approval stage, (subdivision map, land use permit, etc), the County may consult with the appropriate water agency. The County, based on information furnished or available to it from consultations with the appropriate water agency, the applicant or other sources, should determine whether (1) capacity exists within the water system if a development project is built within a set period of time, or (2) capacity will be provided by a funded program or other mechanism. Project approvals conditioned on (1) or (2) above, will lapse according to their terms if not satisfied by verification that capacity exists to serve the specific project ("will serve letters"), actual hook-ups or comparable evidence of adequate water quantity and quality availability.

### Sanitary Sewer

The County, pursuant to its police power and as the proper governmental entity responsible for directly regulating land use density or intensity, property development and the subdivision of property within the unincorporated areas of the County, shall require new development to demonstrate that adequate sanitary sewer quantity and quality can be provided. At the project approval stage, (subdivision map, land use permit, etc), the County may consult with the appropriate sewer agency. The County, based on information furnished or available to it from consultations with the appropriate sewer agency, the applicant or other sources, should determine whether (1) capacity exists within the sewer system if the development project is built within a set period of time, or (2) capacity will be provided by a funded program or other mechanism. Project approvals conditioned on (1) or (2) above, will lapse according to their terms if not satisfied by verification that capacity exists to serve the specific project ("will serve letters"), actual hook-ups or comparable evidence of adequate sewage collection and wastewater treatment capacity availability.

### Fire Protection

Fire stations shall be located within one and one-half miles of developments in urban, suburban and central business district areas. Automatic fire sprinkler systems may be used to satisfy this standard.

### Public Protection

A Sheriff facility standard of 155 square feet of station area per 1,000 population shall be maintained within the unincorporated area of the County.

### Parks and Recreation

Neighborhood parks: 3 acres required per 1,000 population.

### Flood Control and Drainage

Require major new development to finance the full costs of drainage improvements necessary to accommodate peak flows due to the project. Limit development within the 100 year flood plain until a flood management plan has been adopted and implementation is assured. For mainland areas along rivers and bays, it must be demonstrated that adequate protection exists through levee protection or change of elevation prior to development. Development shall not be allowed in flood prone areas designated by the Federal Emergency Management Agency until a risk assessment and other technical studies have been performed.

### IMPLEMENTATION MEASURES

- 4-a. Incorporate the performance standards outlined in Policy 4-3 into the review of development projects.
- 4-b. Work cooperatively with the 18 cities and the Contra Costa County Transportation Authority through each of the Subregional Transportation Committees to define action plans for mitigating the impacts of development on Routes of Regional Significance.
- 4-c. Require traffic impact analysis for any project which is estimated to generate 100 or more AM or PM peak-hour trips based upon the trip generation rates as presented in the Institute of Traffic Engineers (ITE) Trip Generation, 4th edition, 1985.
- 4-d. Require that during the review of development proposals, the traffic impact analysis shall determine whether a project could cause a signalized intersection or freeway ramp to exceed the applicable standard and shall identify mitigations/fees such that the intersection or ramp will operate in conformance with applicable standards. Development proposals shall be required to comply with conditions of approval detailing identified mitigation measures and/or fees. In no event shall Local Road Improvement and Maintenance Funds replace development mitigation fee requirements, pursuant to Measure C.
- 4-e. Establish through application to the Contra Costa Transportation Authority, and in conjunction with the regional committees, a list of Routes of Regional Significance and Intersections proposed for Findings of Special Circumstances. Proposed projects affecting these routes and/or intersections will require alternate mitigation as specified in Action Plans to be adopted by the Authority, but in this respect only, shall not be subject to LOS Performance Standards. A preliminary list, adopted by the County as an Interim Measure, includes the following:

#### West County

- o Interstate 80
- o San Pablo Avenue-Parker Avenue-Willow Avenue
- o San Pablo Dam Road-Camino Pablo
- o Appian Way
- o Valley View Road

Central County

- o Interstate 680
- o State Route 24
- o State Route 4 Freeway
- o Pacheco Boulevard (South of Arthur Road)
- o Pleasant Hill Road-Taylor Boulevard
- o Treat Boulevard
- o Crow Canyon Road (West of San Ramon)
- o Ygnacio Valley Road

East County

- o State Route 4 Freeway

Intersections Proposed for Findings of Special Circumstances:

West County

- o Pomona Avenue/Second Avenue
- o El Portal Drive/Glenlock Drive
- o I-80 Westbound off-ramp/Cummings Skyway

Central County

- o Reliez Valley Road/Grayson Road
- o Olympic Boulevard/Tice Valley Boulevard

East County

- o State Route 4/Lone Tree Way
- o State Route 4/Byron Highway (Borden Junction)

The following facilities shall be designated regional routes in the County General Plan:

State Facilities

- o Interstate 80
- o Interstate 580
- o Interstate 680
- o State Route 4
- o State Route 24
- o State Route 242



## Surface Streets

### **East County**

- o Bailey Road
- o Byron Highway, South of SR4
- o Proposed Delta Expressway
- o Evora Road
- o Kirker Pass Road
- o Lone Tree Way
- o Walnut Avenue
- o Willow Pass Road
- o Vasco Road

### **Central County**

- o Pacheco Boulevard, South of Arthur Road
- o Taylor Boulevard
- o Treat Boulevard
- o Waterfront Road

### **West County**

- o Appian Way, West of Sobrante Avenue
- o Cummings Skyway
- o Oled Highway 40
- o Parker Avenue
- o Richmond Parkway
- o San Pablo Avenue
- o San Pablo Dam Road
- o Valley View Road

- 4-f. In the event that any basic route does not meet adopted standards the County shall consider amendments to either its General Plan Land Use Element, Zoning, Capital Improvement program or other relevant plans or policies in order to attain the standards. If this is not feasible for the reasons specified in the Transportation Authority's "Implementation Guide: Traffic Level of Service Standards and Programs for Routes of Regional Significance" application for findings of special circumstances shall be made to the Transportation Authority. Such application shall include alternative proposed standards and mitigation measures.
- 4-g. Capital projects sponsored by the County and necessary to maintain and improve traffic operations will be specified in a five year Capital Improvement Program (CIP). Funding sources for such projects, as well as intended project phasing, if any, shall be generally identified in the CIP.
- 4-h. The County will participate in the Contra Costa Transportation Authority Conflict Resolution Process as needed to resolve disputes related to the development and implementation of Action plans and other programs described in the Authority's Mode Growth Management Element.

- 4-i. Following adoption of Regional Route Action Plans, the County will implement specified local actions in a timely manner, consistent with adopted action plans.
- 4-j. As part of its program to attain Traffic Service levels, the County shall continue to implement its Transportation System Management Ordinance.
- 4-k. No development project (subdivision map, land use permit, etc) shall be approved unless findings of consistency have been made with respect to Policy 4-3.
- 4-l. The County will adopt a development mitigation program to ensure that new development pays its fair share of the cost of providing police, fire, parks, water, sewer and flood control facilities.
- 4-m. The County will only approve projects after finding that one or more of the following conditions are met:
  - (a) Assuming participation in adopted mitigation programs, performance standards will be maintained following project occupancy;
  - (b) Because of the characteristics of the development project, specific mitigation measures are needed to ensure the maintenance of standards, and these will be required as conditions of project approval; or,
  - (c) Capital improvements planned by the service provider will assure maintenance of standards.
- 4-n. Capital Projects sponsored by the County and necessary to maintain levels of performance shall be identified in the Five year CIP. Funding sources for the complete cost of the improvements, and phasing, if any, shall also be identified.
- 4-o. All new development shall contribute, to or participate in, the improvement of the parks, fire, police, sewer, water and flood control systems in reasonable proportion to the demand impacts and burdens generated by project occupants and users.
- 4-p. The County Shall develop and carry out a growth management/monitoring program as generally indicated in Figure 4-1, as follows:
  - (a) a land supply and development monitoring process;
  - (b) periodic review of performance standards and monitoring of infrastructure constraints;
  - (c) interagency coordination and decision-making to provide information for the first two tasks and successfully implement the overall growth management program;
  - (d) a jobs/housing performance evaluation to determine their relative balance within each sub-region of the County; and
  - (e) growth management determinations, a process which identifies growth areas capable and incapable of meeting performance standards, and directs resources to overcoming any constraints.

These components are described in detail below.

##### Adoption of Performance Standards

The first step in the growth management program process is completed upon the adoption of performance standards for public facilities and services in this Growth Management Element. Figure 4-1 shows the flow chart of the growth management process.

##### Land Supply/Development Monitoring Analysis

The second step in the growth management process, an analysis of land supply and development monitoring, will commence at the beginning of each calendar year. Annual status reports on the implementation of the General Plan and its growth management program will be submitted to the Board of Supervisors and City Councils in June. This status report will fulfill the requirements of Government Code 65400 (b) in the State planning and zoning laws, which requires that every city and county must prepare an annual report to the City Council or Board of Supervisors which summarizes the status of the General Plan and the progress that has been made in its implementation. The subsequent steps in the process, commencing with the performance standards evaluation, will occur on a five-year cycle.

The land supply and development monitoring process is a two-part component designed as the basis for the periodic re-examination of lands available in the County for urban development. The availability of developable lands is then contrasted against the actual rate of growth which has been measured over the most recent period. In essence, this component is a land supply and demand tracking process. This process is designed to work in tandem with the other four components (performance standards/infrastructure constraints analysis, interjurisdictional coordination, jobs/housing balance analysis, and growth management determinations) in order to obtain an updated, working perspective of the current capacity of the County to accommodate growth.

The land supply and development monitoring process is prepared in an objective fashion by staff, using a set methodology defined and agreed to by the jurisdictions involved (the County, the 18 cities, the Local Agency Formation Commission (LAFCO) and the individual service providers). The re-examination of the land supply (initially set by the General Plan Review Program) will occur on an annual basis, in concert with the State Population Certification program which is already conducted jointly between the County and city planning departments. (This existing program involves each jurisdiction reporting to the County the number of housing completions in each census tract during the calendar year.)



Using a standard format and methodology should provide a high degree of confidence in the process and the established annual schedule should alert the development interests, city agencies, and special districts as to when their contribution will be critical. At the beginning of each annual cycle, formal notification will be given to each of the cities informing them that the land supply and development monitoring process is being initiated and requesting their active participation and cooperation.

The Land Use Information System (LUIS), developed in 1987 by County and city planning staffs and consultants for the General Plan Review Program, provides the foundation for tracking overall land supply, land absorption, and changing land uses in the County. The specific questions that must be answered during this process with the use of the updated LUIS data system are:

- o how many acres of vacant land in the County, specified by land use type, are identified as available for development?
- o what changes have occurred in these numbers since the previous evaluation?
- o how many acres of underutilized or previously developed land are available for redevelopment?
- o how many acres of land County-wide have been identified as unavailable for development based upon environmental, health and safety, public resource, or other conditions? The County Community Development Department staff will prepare a report which examines the absorption rate (i.e. approved development projects) and the General Plan Amendment requests that have been received. The report on the status of development areas will rely upon residential and commercial/industrial building permit and other project approval information from the cities. This permit approval and General Plan Amendment application information will then be compared to the expected rate of residential and job growth projected for the jurisdiction over the planning period by the respective General Plans. The annual report will be forwarded to decision-making bodies for use in reviewing further General Plan Amendments which would alter the land supply component.

#### Performance Standards Evaluation and Infrastructure Constraints Analysis

While the second component of the growth management program (land supply and development monitoring) will be prepared on an annual basis, the final four components will generally be performed only once every five years. Although these final four components of the Growth Management Program will be comprehensively and formally evaluated every five years, circumstances may necessitate evaluating and modifying the standards during the annual review of the land supply and development component of this Growth Management Program. If circumstances so necessitate, the Board of Supervisors should consider all information before it, including the Land Supply/Development Monitoring Analysis, fiscal constraints, and other information obtained through consultation with the County Transportation Authority, before modifying

the standards. The data and analysis generated in the annual land supply and development monitoring reports will be aggregated for use in the tasks outlined in the following processes.

The intent of this third component of the growth management program, performance standards and infrastructure capacity evaluation, is to re-examine minimum allowable performance standards for development projects set in the General Plan, and to determine the remaining available capacities of certain infrastructure facilities.

The growth management program for the Contra Costa County General Plan mandates the establishment of infrastructure performance standards for several different services or facilities, including circulation (traffic), sanitary sewage, flood control and drainage, water supply, police and fire protection and emergency services, and parks and recreation. These standards and policies attempt to define a quality of life by setting benchmark indicators of the minimum levels of service required for specific urban services.

Every five years the performance standards would be reviewed by staff and the service providers by examining prior experience and ability to serve. In addition, service districts may be provided an opportunity to explain why certain standards are not being met and to explore measures to be taken to alleviate the situation. This information would then be used to evaluate whether the standards for the current review period were appropriate.

The second major task to be completed during this phase of the growth management program is an evaluation of the remaining infrastructure capacity in various areas of the County. Part of this evaluation will determine where and why certain existing urbanized areas are not being adequately served. The assumption is that adequate infrastructure capacities can be engineered and built to serve virtually any amount and location of urban growth within the ULL, but that opportunities exist to plan for cost-effective and efficient growth in areas particularly within the ULL, where underutilized infrastructure capacities already exist or where the extension of services is relatively unconstrained compared to other areas.

The basic data requirements of this portion of the process include:

- o a determination of the remaining capacity for each facility or service provider based upon the defined performance standards, and identification of the geographic areas that could be served by the capacity;
- o an itemization of funded infrastructure improvement projects, their location and expected date of completion, and the service area or population they are designed to serve;

- o identification of urbanized areas with inadequate service, as defined by the adopted performance standards;
- o an itemization of the major capital improvements not now funded but needed to bring existing areas into compliance with the performance standards;
- o itemization of major capital improvements necessary to serve anticipated future development at the adopted service level, and the cost of these improvements;
- o identification of major physical, economic and/or environmental constraints to the provision of service or facilities in a given area; and
- o identification of possible sources of funding for the improvements.

The object of the data gathering is to illustrate where future growth can and cannot occur without major investment in new or improved infrastructure systems, and to identify the level and source of financing required. Additionally, the exercise will allow the preparation of estimates of future required capacity based upon the performance standards. One outcome of this process will be to provide with up-to-date information concerning where future growth is expected to occur, thus assisting in capital facilities planning efforts.

To ensure that high density "leapfrog" growth does not occur, as a matter of policy, this growth management program mandates that new urban and central business district levels of development shall not be approved unless the development is within the ULL and near existing or committed urban or central business district levels of development.

#### Jobs/Housing Performance Evaluation

The purpose of this step is to provide a basis for assessing the jobs/housing balance within each section of the County for the current five year review cycle, to assist the jurisdictions in the sub-regions in determining preferred locations for residential and employment growth, and to assist in focussing the direction of implementation programs.

The jobs/housing balance evaluation is based upon the County's Land Use Information System data base, augmented by the information provided in the development monitoring evaluation. The evaluation considers growth in housing units and employment and housing and employment availability, relative affordability and commute patterns, and to the extent that the data are available, price of the units and wage levels of the jobs added.



The jobs/housing performance evaluation will be used to identify areas where jobs or housing should be stimulated and encouraged. It would also be used to provide information about areas in which infrastructure deficiencies need to be corrected in order to facilitate a better jobs/housing balance.

#### Interjurisdictional Coordination and Decision-Making

The growth management program outlined here will not succeed without the cooperation and active participation of the County, the Local Agency Formation Commission, the 18 cities, and the service providers. These agencies and cities may view cooperation with the County's management program as a threat to their local authority over land use or other growth issues. The County's efforts to achieve cooperation must be aimed at persuading the cities and agencies that the growth management program will ultimately enhance their ability to meet their own General Plan goals. In addition, the County will participate in the cooperative planning process established by the County Transportation Commission for the purpose of reducing the cumulative regional traffic impacts of development.

Interjurisdictional cooperation would not require all of the cities and agencies to adopt the same goals, policies and implementation measures as will be included in the County's General Plan and growth management program. However, it would be desirable for the County to request that the cities and agencies adopt resolutions that specifically recognize and accept the management program and its premise.

A key commitment by the jurisdictions involves the dedication of a relatively small, but adequate, level of staff time to assist the County in gathering the required data for the necessary planning studies. Additional commitments must be made on the part of policy makers and staff to review the annual land supply and development monitoring reports, consider them when making important planning decisions, and to actively participate in the growth management determination process every five years.

#### Growth Management Determinations

Building upon the preceding components of the growth management program, the final aspect of the process involves using the reports that have been generated to make the important decisions about where future growth in the County should be encouraged in order to minimize infrastructure costs and to enhance the overall level of "quality of life." The process for making these determinations is as important as the determinations themselves. The process can help to achieve consensus among cities and the County (in consultation with service providers) as to appropriate amounts and locations of new residential, commercial and industrial

growth in the County. The growth management determination process should include the following steps, several of which are based upon information developed in the previous components of the program:

- o indicate on a County General Plan map the current city boundary lines, Spheres of Influence, the Urban Limit Line and current service areas for all of the major utilities/facilities;
- o add to the base map information regarding improvements or extensions to service systems that have been completed since the last review period or improvements itemized in capital improvement programs, as well as constructed and approved development projects and adopted General Plan Amendments;
- o identify lands that have been determined to be undevelopable;
- o identify on the map the geographic areas with infrastructure constraints and the locations of development projects that have been unable to meet performance standards;
- o review the annual land supply and development monitoring reports in conjunction with the performance standards and infrastructure constraints analysis reports to determine whether an adequate supply of vacant land is designated for urban use in the County and city General Plans, on both a Countywide and subregional basis, to allow the anticipated amount of urban development during the remainder of the twenty year period. This urban development must be subject to the 65/35 Land Preservation Standard. (See Section 3, Land Use Element.)
- o Determine whether adjustment to the urban limit line is needed in order to provide sufficient land to accommodate anticipated needs.

Growth management determinations shall be made in consultation with the County Transportation Authority. In addition, it is anticipated that these growth management determinations will be made in a series of joint meetings conducted on a subregional basis with representatives of the cities. The Local Agency Formation Commission (LAFCO) and the service districts should also be consulted. Staff will present the base map and accompanying reports to the County and City Planning Commissions, LAFCO and service district boards, with a request that the agencies review the recommendations and make formal comments. After this review period is complete and appropriate changes, if needed, have been made, the map and reports will be recirculated to all of the jurisdictions in the County. The final action will be to request that the cities, LAFCO and service providers adopt resolutions in support of the recommendations and to initiate any General Plan Amendment hearings which may result from the review process.

#### Definitions of Terms

The following definitions apply to the geographic terms used with respect to the growth management program only. The level of service designations for unincorporated County areas are shown in Figure 4-2.

Rural. Rural areas are defined as generally those parts of the County that are designated in the General Plan for agricultural, open space or very low density residential uses, and which are characterized by medium to very large parcel sizes (10 acres to several thousand acres). These areas have very low population densities, usually no more than 1 person per acre or 500 people per square mile.

Suburban. Suburban areas are defined as generally those parts of the County that are designated in the General Plan for low and medium density single family homes; low density multiple family residences; low density neighborhood- and community-oriented commercial/industrial uses; and other accompanying uses. Individual structures in suburban areas are generally less than 3 stories in height and residential lots vary from about one fifth of an acre (8,000 or 9,000 square feet) up to 2 or 3 acres. Population densities in suburban areas fall within a wide range, from about 1,000 to 7,500 persons per square mile (1.5 to 12.0 people per acre).

Urban. Urban areas are defined as generally those parts of the County that are designated in the General Plan primarily for multiple family housing, with smaller areas designated for high density single family homes; low to moderate density commercial/industrial uses; and many other accompanying uses. Urban areas usually include clusters of residential buildings (apartments and condominiums) up to three or four stories in height and single family homes on relatively small lots. Many commercial strips along major arterial road are considered urban areas.

Examples of urban areas in Contra Costa County are the older neighborhoods in Richmond, El Cerrito, Pittsburg, and Antioch and the downtown commercial districts in smaller cities such as Martinez, Danville, and Lafayette. Population densities in urban areas are usually at least 7,500 persons per square mile (12.0 people per acre). Employment densities in commercial areas may range up to about 15 jobs per acre.

Central Business District/Major Commercial Center. Central business districts or major commercial centers are defined as those areas designated in the General Plan for high density commercial and residential uses. They consist of either the downtown area of a major city in Contra Costa County (Concord, Walnut Creek, and Richmond) or a large business/office complex (such as Bishop Ranch or the Pleasant Hill BART station area). These areas are characterized by large concentrations of jobs and consist of clusters of buildings four stories or more in height. CBD's or major commercial centers generally have employment densities.







## 5. TRANSPORTATION AND CIRCULATION ELEMENT

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## 5. TRANSPORTATION AND CIRCULATION ELEMENT

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### 5.1 INTRODUCTION

The purpose of this Element of the Contra Costa County General Plan is to establish transportation goals and policies, and to establish specific implementation measures to assure that the transportation system of the County will have adequate capacity to serve planned growth in Contra Costa County through the year 2010. The intention of this Element is to provide a plan and implementing measures for an integrated, multi-modal transportation system that will safely and efficiently meet the transportation needs of all economic and social segments of the County and provide for the transport of goods and services throughout Contra Costa County.

The transportation system outlined in this Element recognizes on the one hand the limited availability of transportation funding and, on the other hand, increased demands for mobility within Contra Costa County. As a result, the Element emphasizes the efficient use of the existing transportation system, particularly existing roadways and transit systems, and cost effective enhancements to this system to accommodate planned growth consistent with the Land Use Element. Nonetheless, the County will continue to seek revenue from a variety of sources for needed transportation improvements and to work toward the establishment of new and creative funding mechanisms (i.e., private/public and regional partnerships) consistent with the goals and policies of the Growth Management Element and Measure C - 1988.

### LEGAL AUTHORITY

The Transportation and Circulation Element is prepared pursuant to Section 65302(b) of the California Government Code. This Element has been a mandatory component of local General Plans since 1955. The Transportation and Circulation Element is required to address the location and extent of existing and planned transportation routes, terminals, and other local public utilities and facilities. It is further required to be consistent with the other elements of the General Plan, accommodating future travel demand and contributing to, rather than inhibiting, the attainment of desired land use patterns in the Land Use Element.

## 5.2 RELATIONSHIP TO OTHER ELEMENTS

Section 65300.5 of the California Government Code requires that the various elements of a General Plan comprise an integrated, internally consistent, and compatible statement of policies for the adopting agency. The law emphasizes that the Transportation and Circulation Element be coordinated with the Land Use Element. The transportation plan, policy, and implementing measures established by this Element comply with the requirement by utilizing the same projections of future population and economic activity as does the Land Use Element, by using the same geographic distribution of future population and economic activity as expressed in the Land Use Element map, and by designing the transportation plans and policies to contribute to the achievement of the planned land-use pattern.

The Roadway and Transit Network Plans shown in this element have been constrained to reflect limited financial resources. Consistency with the Land Use Element is maintained through the interplay of these elements with the Growth Management Element. The Transportation and Circulation Element funding programs related to capital projects are correlated with the programs contemplated in the Growth Management Element. The Transportation and Circulation Element incorporates the implementation of the Contra Costa Transportation Authority's (CCTA), Expenditure Plan passed by the voters in November 1988. This Element also assumes availability of the revenue generated by Regional Measure 1, the Propositions 108, 111 and 116 approved by the voters in June 1990. The Board of Supervisors designated the CCTA as the Congestion Management Agency for Contra Costa County. The County will meet the congestion management planning requirements through the planning process established by the CCTA.

A separate Scenic Routes Element was previously required as a mandatory General Plan component. However, state law now encourages the scenic routes' goals and policies be included within the Transportation and Circulation Element. Thus, this plan merges the scenic route discussion and policies into this Element. Biking, Hiking and Equestrian Trails Plans are included as part of the Recreation section of the Public Facilities/Services Element. It should be noted that some transportation related issues are included in other elements of the Contra Costa County General Plan. Policies that address the impacts of vehicle emissions on air quality, for example, are found in the Open Space/Conservation Element. The Noise Element also addresses transportation issues by identifying the noise impacts of traffic in the County, based upon the Roadway Network Plan and the traffic volumes that are forecasted on key roadways.

The topic of oil and natural gas pipelines, often covered in Circulation Elements is discussed in the Safety Element.



### 5.3 RELATIONSHIP TO OTHER GENERAL PLAN DOCUMENTS

The goals, policies and implementation measures contained in this Element are intended to guide planning for public and private projects that are subject to either approval of the County planning agency, or to review by County staff, although they may be under the jurisdiction of other public agencies operating in the County. Such goals, policies and implementation measures are further intended to be in accordance with other elements of the General Plan, as well as with other planning documents, such as the I-80 Strategic Transportation Study.

The Transportation and Circulation Element is largely consistent with the Metropolitan Transportation Commission's 1988 Update of the Bay Area Regional Transportation Plan. Portions of the Contra Costa Commuterway (which includes high occupancy vehicle lanes for State Routes 4 and 242, and a busway along the Southern Pacific San Ramon Branchline north of Rudgear Road), and the Delta Expressway, are not included in the Regional Transportation Plan.

### 5.4 ORGANIZATION OF TRANSPORTATION AND CIRCULATION ELEMENT

This Transportation and Circulation Element addresses roadways, transit, bikeways, and transportation system management (TSM) programs, as well as air, rail, and water transportation facilities. The format of the Element is as follows:

- (1) An analysis of existing and future transportation needs, and a presentation of the computerized transportation modeling results that were conducted as part of the General Plan adoption. Technical data are briefly summarized.
- (2) A presentation of introductory discussion and mapping (if appropriate), goals, policies and implementation programs for each of the following topics:
  - o Roadways and transit
  - o Transportation System Management
  - o Bikeways
  - o Scenic Routes
  - o Airports and Heliports
  - o Ports and Proprietary Wharves
  - o Railroads

Note that the required discussion of terminals is provided as part of the treatment of airports, heliports, ports, proprietary wharves, and railroads.

## 5.5 EXISTING AND FUTURE TRANSPORTATION NEEDS

Travel conditions in Contra Costa County are greatly influenced by its location on the eastern side of the San Francisco Bay metropolitan region (see Figure 5-1). Bridges, freeways, and trains link Contra Costa to every part of the Bay Area. Commute patterns are especially affected by the employment centers in San Francisco and Alameda County, and the residential areas of Solano County. Over 18 percent of all trips and 46 percent of work trips originating in Contra Costa are destined for another Bay Area county.

Such intercounty travel patterns require that the Transportation and Circulation Element recognize the impacts of development outside Contra Costa County in addition to projected development inside the County. The Element accomplishes this task by incorporating projections of future population and employment activity in the remaining eight Bay Area counties for the year 2005. These projections were prepared by the Association of Bay Area Governments, and were combined with the Contra Costa data to estimate the influence of regional growth on the level and orientation of travel in the County. Estimates of inter-regional traffic, primarily from the Central Valley, were also included in the forecasts.

### EXISTING NETWORK

The County's transportation system is comprised of an interconnected network of federal, state and county roads, regional transit systems, bikeways, elderly and handicapped transportation services (paratransit), as well as air, water and rail service, and pipelines. Pipelines are discussed in the Safety Element.

#### Roadways

The County's roadway network includes Interstates 80, 580, and 680, State Routes 24 and 242, and portions of State Route 4. In addition, numerous locally maintained arterials, streets and roads make up the remaining network. Of special importance are the four bridges and three tunnels that link Contra Costa with the Bay Area Region. These include the Richmond-San Rafael Bridge, Carquinez Bridge, Benicia-Martinez Bridge, Antioch Bridge, and the Caldecott Tunnel.

EXISTING TRANSPORTATION SYSTEM:



Figure 5-1 East Bay Regional Transportation System





## BART

The Bay Area Rapid Transit (BART) is the primary form of public mass transit in Contra Costa County. BART is a regional transit operator with two train lines and eight stations serving the County and providing connections to Alameda and San Francisco Counties. The Richmond line has three Contra Costa stations with an average daily ridership of approximately 21,000 and the Concord line with five Contra Costa stations with an average daily ridership of approximately 52,000. BART supplements its service with express bus routes connecting outlying stations with areas of the County.

## Bus

Bus service makes up the balance of the County's mass transit system. AC Transit serves portions of Western Contra Costa County with fixed bus service to Northern Alameda County and downtown San Francisco. The northwest portion of the County is served by the Western Contra Costa Transit Authority (WESTCAT), which operates demand-response dial-a-ride buses. Central Contra Costa County is served by fixed route buses operated by the Central Contra Costa Transit Authority (CCCTA), also called the County Connection. The eastern end of the County is provided both fixed route and demand-response bus service by the Eastern Contra Costa Transit Authority (Tri-Delta).

## Park and Ride

Park and Ride facilities have been established throughout the County to encourage the use of transit and high occupancy vehicles. BART maintains twelve park and ride lots providing over 11,800 free parking spaces for patrons of BART trains and express buses. The park and ride lots at BART stations operate at capacity and are considered a major constraint to increased ridership. Caltrans has established thirteen park and ride facilities in the County providing over 660 spaces, which are used primarily as staging areas for carpools and vanpools. The most widely used lot is at Rudgear Road, which is often filled to capacity.

## Bikeways

County bikeways include both on-road and off-road facilities which are operated and maintained by the County, cities and the East Bay Regional Park District. For the nine-county Bay Area, bicycles account for 2.3 percent of all trips and 1.7 percent of all work trips. Bikeways in the County are currently dominated by recreational users and are not widely used for commute purposes. This plan proposes ways of increasing the use of bicycle travel as a component of the transportation plan.

Further discussion, as well as goals, policies and implementation measures, regarding bikeways are included in the "Parks and Recreation" section of the Public Facilities Services Element.

### AMTRAK

AMTRAK operates five trains each day that provide intercity rail passenger service to Contra Costa County. These trains run along the Southern Pacific main line between Oakland and Martinez, crossing the Carquinez Strait to the Sacramento Valley, and a combination of Southern Pacific and Atchison Topeka & Santa Fe tracts from Martinez to the Central Valley and points south. Passenger stations are located in Antioch, Martinez, and Richmond.

### Air, Water and Rail

Several air, water, and rail transportation systems and facilities are located within the County. A description and policies regarding Buchanan Field and the East County airports is found in the "Airports and Heliports" section. A similar description and relevant policies for water transportation facilities are included in the section "Ports and Proprietary Wharves", and rail related facilities and policies are described in the "Railroads" section.

### EXISTING TRAVEL DEMAND

The most comprehensive and recent data on local travel was collected during the 1981 Metropolitan Transportation Commission (MTC) Travel Survey. The travel behavior of nearly 5,000 Bay Area households were surveyed. The survey found that Contra Costa households generate more trips than the average Bay Area household (9.8 trips/day vs. 8.7 trips/day, respectively). Contra Costa households are also more likely to use a car for their trips than other Bay Area households (8.1 in-vehicle trips/day vs. 6.8 in-vehicle trips/day, respectively).

To develop a more up-to-date estimate of travel demand in Contra Costa County, a computerized travel model was used. This model was developed in 1986 and 1987 for use in evaluating alternative transportation and land use scenarios for the General Plan. The model was validated to 1985 level traffic conditions, and then used as a means of forecasting year 2005 level traffic conditions for various scenarios.

Since the model was validated to year 1985 conditions, extensive information on estimated travel conditions are available for that year. This information has been updated, where possible, to reflect recently obtained



information about 1990 conditions. A discussion of the 1990 estimates of travel behavior in Contra Costa County based on this information is provided below.

In 1990, it is estimated that over 1 million trips were made by Contra Costa County residents on an average weekday. The need for transportation facilities is most acute during commute travel periods, in both the morning and the evening. Of the daily commute trips generated in Contra Costa County in 1990, about one-quarter were work related. Of these trips, close to half were destined for work locations outside the County, with the most significant destinations in Alameda County and San Francisco.

Contra Costa County imported about 65,000 workers to fill jobs in the County in 1985, while exporting about 120,000 residents workers to fill jobs outside the County. An estimated 190,000 work trips were attracted to jobs in Contra Costa County each weekday in 1990. Approximately 68 percent of the work trips destined for the County were made by County residents, 16 percent by Alameda County residents, and 6 percent by Solano County residents. A considerable amount of the traffic that entered Contra Costa County during peak hours in 1990 was through traffic going to jobs in other counties. For example, about one-half the traffic on I-80 and I-580 in Contra Costa County is estimated to be through traffic.

The result of these travel patterns is that considerable congestion occurs on the County's regional roadway system, as well as on many arterial streets in specific communities. Locations that act as bottlenecks on a regular basis include:

- o Much of I-80 through Contra Costa County, especially at the Carquinez Bridge and through Richmond.
- o Much of San Pablo Avenue in Contra Costa County.
- o State Route 24 at the Caldecott Tunnel, and on the approach to the I-680 interchange.
- o I-680 at the Benicia Bridge, at the junction with State Route 242, and through the State Route 24 interchange, and through San Ramon.
- o State Route 4 at the Willow Pass Grade.
- o Ygnacio Valley Road, through Walnut Creek and Concord.
- o Camino Pablo through Orinda.

## FUTURE TRAVEL DEMAND

Travel demand forecasts were made for year 2005 using the computerized transportation model developed in 1990. Travel demand is primarily a function of the projected land-use in Contra Costa and neighboring counties. The General Plan is the basis for projected land use in Contra Costa. ABAG's projections for year 2005, described in Projections 90, is the basis for land use forecasts in neighboring counties. The ABAG data was adjusted to account for 163,000 surplus jobs that could not be matched to employed residents in the region. An assumption that 56,000 jobs would be matched with employees living in the Central Valley and south of Santa Clara County was incorporated into the transportation model. The remaining 107,000 surplus jobs were removed from the ABAG forecasts and were assumed to locate outside the Bay Area, or to occur after 2005.

An estimated 1.5 million person trips will be generated in Contra Costa County each weekday by year 2005. This represents a 35 percent increase above the 1985 level. Work trips, a primary factor in peak hour congestion, will increase by 46 percent to nearly 350,000 person trips per day. The rapid increase in work trips reflects a greater number of workers per household anticipated in the demographic forecasts. The characteristics of the future transportation system will determine the routes and mode of travel for these future trips. These characteristics will be described in later sections of the Transportation and Circulation Element.

Since the model was developed, ABAG has updated forecasts of Bay Area population and employment characteristics. In addition, Contra Costa County has updated its land use projections for the General Plan. The main changes to the estimates used for travel projections are:

- o Addition of approximately 4,300 households in the Cypress Corridor in East County.
- o Inclusion of recently approved general plan amendment such as the Bethel Island General Plan Amendment (See Appendix K).
- o Addition of 2,000 employed people in East County.

The results of these changes is an overall increase in trip making of 6.5 percent, from 1,460,000 trips per day to 1,552,000 trips per day. Work trips would increase by 6.4 percent, from 350,000 trips to 368,000 trips. Unless indicated otherwise, all discussion of 2005 model estimates are based on the earlier forecasts.

The impacts of truck traffic was incorporated into the road capacity assumptions at the critical locations of State Route 4 over the Willow Pass and Kirker Pass Roads.

## FUNDAMENTAL CONCEPTS THAT SHAPE THIS ELEMENT

The projected increase in travel demand will require expanded transportation facilities and services, since existing facilities are strained to near capacity during rush hours. The need to provide greatly expanded facilities poses both environmental and financial problems.

The Transportation and Circulation Element can be used to guide, shape and control growth itself and should therefore relate to the issue of growth. However, it is only one component of a General Plan designed as a development, conservation and economic blueprint for the County. Roadway and transit improvements do not necessarily lead to uncontrolled growth. The Land Use Element and Growth Management Element set the timing and densities of future growth. A well-planned and balanced transportation network provides for and accommodates anticipated employment and residential growth and helps to relieve existing congested roadways. A defined transportation network also gives public and private interests a vision of needed improvements and an opportunity to assess costs and develop funding programs well in advance of actual growth.

The following fundamental concepts have been recognized in developing this Transportation and Circulation Element:

- o Traffic flow is limited by the capacity of the system.
- o There are formidable limits to expansion and/or improvements to the system.
- o A desirable living environment and a prosperous business environment cannot be maintained if traffic levels continue to increase without limits. Various methods must be used to control and reshape the impact of automobiles in Contra Costa County and to use other means of transportation to improve the environment.
- o When traffic demand exceeds the capacity of the system, many negative effects result, including congestion, loss of time and productivity, accidents, personal frustration, increase in pollution, adverse community reaction; and use of residential streets for commuting purposes.
- o Contra Costa County, the Bay Area and California will continue to experience population growth over the next 20 years and transportation systems will continue to be strained.
- o Near-term solutions to conflicts between traffic demands and system capacity limits require utilizing existing roadways to the effective limits of their design capacity in order to relieve congestion.
- o Longer-term solutions require either significant enhancements to the system, fundamental changes in travel behavior patterns, or a combination of both.
- o Some of the specific approaches proposed in this Element for both near-term and longer-term solutions include the following:



- Place limits on the capacity of streets and highways which enter the County (near-term).
  - Improve inter and intra-County transit service (longer-term).
  - Expand undersized roadways and plan for new roadways (longer-term).
  - Accept congestion until improvements occur (near-term).
  - Improve the design of new development to provide alternative routes for circulation on the roadway system (near- and longer-term).
  - Improve the design of new development to allow convenient access to alternative forms of transportation.
  - Encourage ride sharing and staggered work hour programs (near-term).
  - Construct HOV lanes and on-ramp metering lights along commute corridors (near-term).
- o Even with the investment of \$3.2 billion in transportation improvements over the life of this plan, the amount of growth in the region and the attractiveness of travel by private automobile will make desired level of service standards (LOS) unattainable along portions of County roadways.

## 5.6 ROADWAYS AND TRANSIT

### INTRODUCTION

The need for roadway and transit facilities is most directly tied to the land use patterns set forth in the Land Use Element. As described above, buildout of the land use plan through the year 2005, together with anticipated growth outside of the County, would place excessive demands on the existing circulation infrastructure in the County. The goals, policies and implementation measures set forth in this section, together with those in the Growth Management Element, are intended to address the future circulation needs of Contra Costa County.

### ROADWAY AND TRANSIT NETWORK PLANS

The Roadway and Transit Network Plans are the result of a coordinated planning process that incorporates the goals, policies and implementation measures of this Transportation and Circulation Element, in addition to the Land Use Element and Growth Management Element. As such, these network plans are a compromise between the ultimate transportation needs of the County, fiscal reality, and the potential development constraints imposed by the Growth Management Element.

The premise of the Roadway and Transit Network Plans is therefore best summarized as follows:

- o A roadway and transit network plan to accommodate travel demand that would result from assumed year 2005 buildout of the land use plan was developed. This plan, called the Maximum Improvements Plan would cost \$5.3 billion and cannot be fully funded with present or anticipated funding sources. Only \$3.2 billion of the Maximum Improvements Plan can be funded, leaving a shortfall of \$2.1 billion.
- o A Financially Constrained Plan was then developed, to match the available funds.
- o The combination of the 2005 Land Use plan with a Financially Constrained transportation network, and the provision of the Growth Management Element, will have the effect of slowing growth in the County until additional transportation revenues are secured and more efficient commuting habits are adopted.

The Financially Constrained Roadway Network Plan is shown in Figure 5-2. The Financially Constrained Transit Network Plan is shown in Figure 5-3. A summary of the major projects in the financially constrained plans is shown in Table 5-1. Also contained in Table 5-1 are the major projects in the Maximum Improvements Plan that cannot be funded.

## ROADWAY DESIGNATIONS AND DESIGN CRITERIA

This section describes the classifications of roadways shown in the accompanying Roadway Network Plan. The purpose of the classifications is to define the Circulation Element's intent for the function and design of roadways specified in the Roadway Network Plan.

### Freeways

Freeways are defined as controlled-access, high speed roadways designed to carry high volumes of intercity, intercounty, and interstate traffic, although they may carry considerable local traffic in urban areas. This class of facilities is devoted entirely to the task of traffic movement, and performs no direct land service function. The following design standards shall apply to freeways:

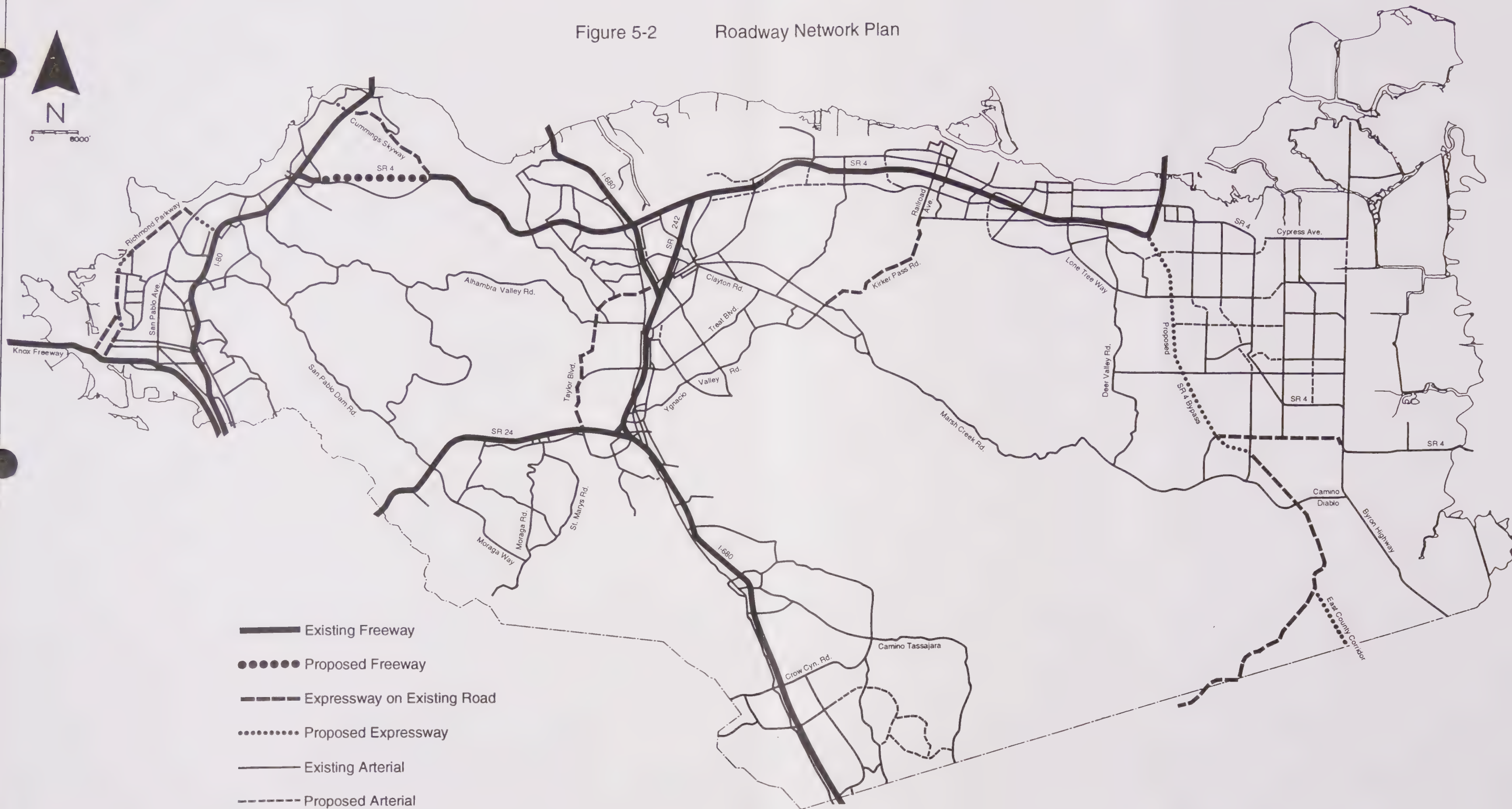
1. Opposing travel lanes shall be separated by a median.
2. Access shall not be permitted from abutting parcels.
3. Auxiliary lanes may be provided from one interchange to another in densely developed urban areas which have closely spaced interchanges or where substantial travel demand exists between two consecutive interchanges.

### Expressways

Expressways are defined as controlled-access, moderate speed roadways serving intercity or intercounty trips. This class of facilities is devoted entirely to the task of traffic movement, and performs limited land service function. Intersections may be at grade. The following design standards shall apply to expressways:

1. Opposing travel lanes shall be separated by a median if there are two or more travel lanes in each direction.
2. Access shall not be permitted from abutting parcels; however, access may be allowed prior to improvement of roadway segments to expressways standards if there is no alternative access route to a parcel.
3. Intersections with median breaks shall occur only at arterials or other expressways.
4. Acceleration and deceleration lanes may be provided at intersections.

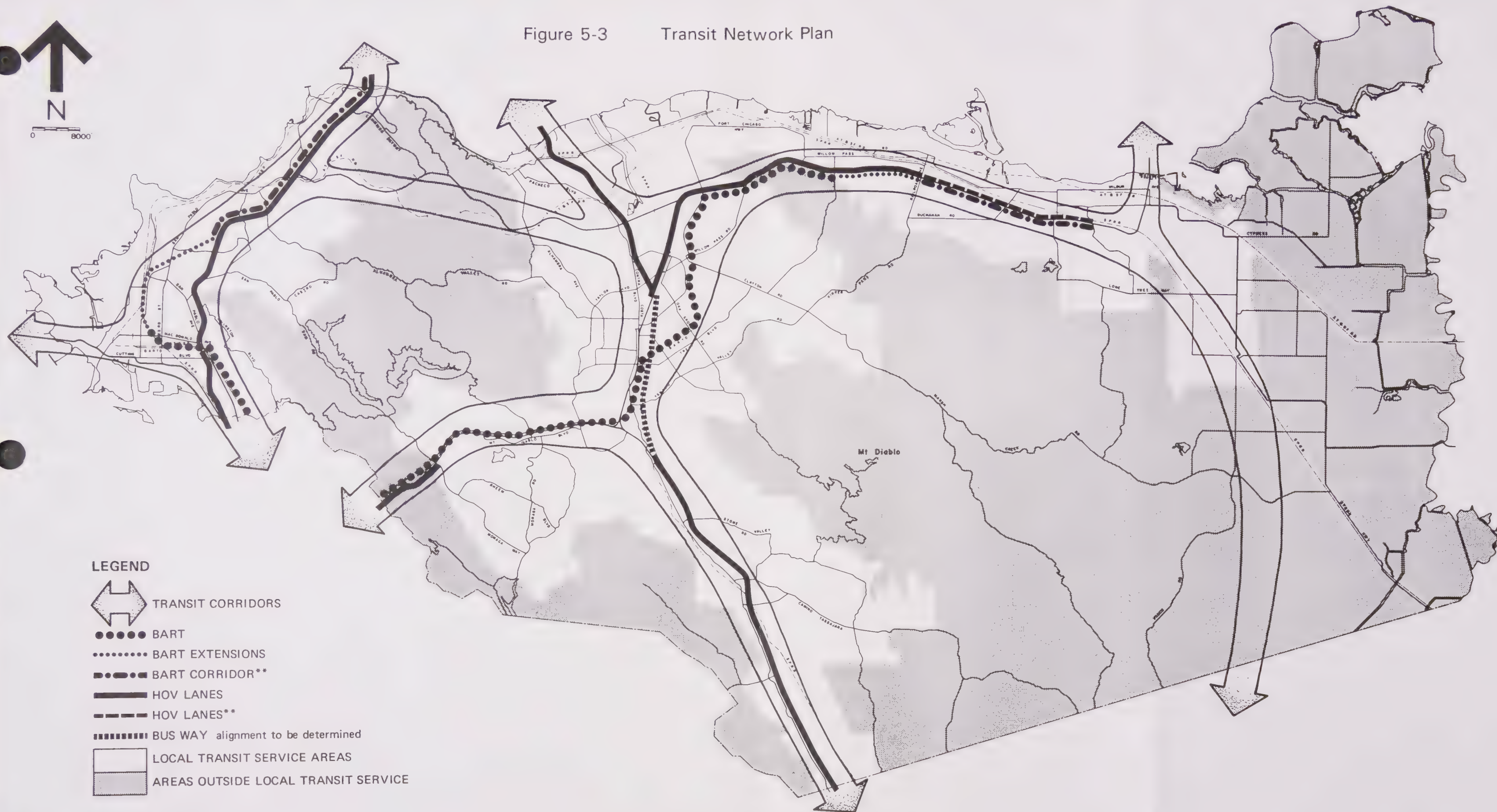




**CONTRA COSTA COUNTY  
CALIFORNIA**



## Transit Network Plan



\*\*Not included in EIR analysis





TABLE 5-1  
MAJOR ROADWAYS AND TRANSIT IMPROVEMENT -  
COST IN MILLIONS (1990 DOLLARS)

|  | <u>Maximum<br/>Improvements</u> | <u>Financially<br/>Constrained</u> |
|--|---------------------------------|------------------------------------|
| <u>Roadway Projects</u>  |                                 |                                    |
| 1. I-80: New Lanes; HOV Lanes, New Bridge  | \$238                           | \$126                              |
| 2. I-580: Knox Freeway, 6-Lane Freeway   | 62                              | 62                                 |
| 3. SR 93: Richmond Parkway   | 206                             | 206                                |
| 4. I-680: New Lanes, SR 24 & SR 4 Interchanges<br>HOV Lanes, Bridge Expansion              | 1,374                           | 1,291                              |
| 5. SR 4: New Lanes, HOV Lane, New Interchanges   | 680                             | 282                                |
| 6. Caldecott Tunnel: Carpool Bypass Lanes, 4th Bore  | 324                             | 1                                  |
| 7. SR 242: Interchange Revisions, Carpool Lanes  | 39                              | 32                                 |
| 8. Delta Expressway 4-Lane Freeway North of Balfour,<br>2-Lane Expressway South of Balfour | 150                             | 135                                |
| 9. Gateway Boulevard, 2-Lane Expressway  | 21                              | 21                                 |
| 10. Contra Costa Commuteway, HOV Lane/Busway   | 70                              | 70                                 |
| 11. Route 84 (Vasco Road): Construct Freeway   | 180                             | 0                                  |
| 12. Route 239 (Byron Highway): Construct Freeway   | 86                              | 0                                  |
| 13. Other Surface Street Improvements  | 777                             | 498                                |
| <u>Transit Projects</u>  |                                 |                                    |
| 14. BART: Capacity Improvements  | 158                             | \$158 <sup>1</sup>                 |
| 15. BART: Pittsburg Extension  | 574 <sup>2</sup>                | 458                                |
| 16. BART: Hilltop Mall Extension   | 297                             | 297                                |
| 17. Other Transit Projects   | <u>79</u>                       | <u>79</u>                          |
| TOTAL  | \$5,315                         | \$3,176                            |

<sup>1</sup> BART has programmed \$475 million for capacity improvements through the district during the next five years.

<sup>2</sup> Assumes freeway expansion to provide right-of-way for BART beyond Bailey Road.

### Arterials

Arterials move traffic to and from freeways, expressways or collectors and are part of an integrated system of major through roadways. Their traffic function is of county-wide or intercity importance, rather than serving primarily local area traffic. Arterials mainly serve to move traffic, but they normally also perform a secondary land service function.

1. Access from abutting parcels may be allowed but shall be secondary to protection of the traffic serving function of the roadway. Driveways and parking shall be restricted or may be prohibited altogether to improve capacity and safety.
2. Opposing travel lanes shall generally be separated by a median if there are two or more travel lanes in each direction.
3. Turning lanes and deceleration/acceleration lanes shall be provided at intersections with roadways designated as arterials or collectors, and are desirable at other intersections.
4. Rights-of-way at approaches to intersections with other arterials shall be sufficient to accommodate dual left-turn lanes.
5. Signalization shall generally give priority to through traffic on the arterial.

### Collectors

Collectors are for internal traffic movement within a community, carrying traffic to arterials and between neighborhoods. They are low speed roadways that do not ordinarily carry a high proportion of through trips and are not, of necessity, continuous for great lengths. Collectors may also serve to provide access to property, especially in rural areas. Access from abutting parcels in residential areas shall be discouraged. Driveways and parking may be restricted.

### Local Roads

Local Roads are low speed, low capacity roadways that provide circulation within neighborhoods and access to adjacent land. Street design standards and layouts are used to discourage through traffic movements, avoid high travel speeds and volumes, and minimize neighborhood noise and safety impacts. Curbside parking is usually allowable.

## TRANSIT NETWORK CONCEPTS

The Transit Network Plan contemplates two different roles for public transportation: 1) provision of basic mobility for those individuals without access to automobiles or who are otherwise transit dependent; and 2) provision of an alternative means of travel for individuals with access to automobiles, especially peak-period



commuters. The Transit Network Plan establishes local transit service areas; areas where development densities will warrant the provision of fixed-route transit service by 2005. Fixed-route transit operations are the primary means of serving the basic mobility needs for transit dependent individuals in urban areas of the County. The Plan assumes additional local bus service to BART stations, as well as the BART extension to Pittsburg and Antioch.

The Transit Network Plan establishes transit corridors along the county's freeways in order to provide high speed alternatives to driving alone on congested freeways. Within these corridors, the County will pursue the construction of rail transit extensions and high occupancy vehicle facilities, the establishment of express bus service, the integration of rail transit and bus service, and the promotion of carpools and vanpools. Existing and proposed studies will identify the feasibility of improving specific transit operations in the Transit Corridors. AC Transit is in the process of implementing a new Comprehensive Service Plan which would change the structure of fixed-route bus service in portions of western Contra Costa. Assembly Bill 1145 authorizes funding for a feasibility analysis of implementing urban and commuter rail service within the Transit Corridors. The I-80 and State Route 4 Transit Corridors are included in implementation plans under development by MTC and the State to increase intercity plans under development by MTC and the State to increase intercity train service for the Auburn/San Jose and Oakland/Central Valley/Los Angeles corridors. The toll bridge revenues designated for transportation alternatives in Regional Measure 1 warrants an examination of additional ferry operations between the East Bay and San Francisco.

Table 5-2 identifies areas where additional park and ride lot capacity will be needed to supplement parking at BART stations and to serve express bus routes and carpools/vanpools. It can be seen that an additional 9,400 park and ride spaces are expected to be needed in Contra Costa County by year 2005. Due to limited transportation improvements assumed in the I-80 and I-680 Corridors, and expected levels of growth in Solano County, almost 9,000 additional spaces in Solano County would be demanded for Solano County residents commuting to jobs south of the Carquinez Strait.

## ROADWAY AND TRANSIT GOALS

The following goals relate to the roadway and transit plan for Contra Costa County:

- 5-A. To provide a safe, efficient and balanced transportation system.
- 5-B. To coordinate the provision of streets, roads, transit and trails with other jurisdictions.
- 5-C. To balance transportation and circulation needs with the desired character of the community.
- 5-D. To maintain and improve air quality standards.

- 5-E. To permit development only in locations of the County where appropriate traffic level of service standards are ensured.
- 5-F. To reduce cumulative regional traffic impacts of development through participation in cooperative, multi-jurisdictional planning processes and forums.
- 5-G. To provide access to new development while minimizing conflict between circulation facilities and land uses.
- 5-H. To ensure the mutual compatibility of major transportation facilities with adjacent land uses.
- 5-I. To encourage use of transit.
- 5-J. To reduce single-occupant auto commuting.
- 5-K. To provide basic mobility to all sectors of the public including the elderly, disabled, and transit dependent.

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TABLE 5-2  
YEAR 2005 DEMAND FOR ADDITIONAL PARK-AND-RIDE LOT SPACES<sup>1</sup>

| <u>Area</u>          | <u>Spaces</u> |
|----------------------|---------------|
| Brentwood            | 1,100         |
| Oakley-Bethel Island | 900           |
| Antioch              | 1,500         |
| Martinez             | 200           |
| Ygnacio Valley       | 1,200         |
| Alamo                | 600           |
| Danville             | 1,700         |
| San Ramon            | 1,100         |
| Lafayette-Moraga     | <u>1,100</u>  |
| TOTAL                | 9,400         |

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<sup>1</sup>

This plan also projects the need for nearly 9,000 park-and-ride spaces in Solano County to serve residents with jobs south of the Carquinez Strait. It is assumed these spaces will be provided by others.

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## ROADWAY AND TRANSIT POLICIES

The following policies relate to the roads and transit system of Contra Costa County.

### Circulation Phasing and Coordination

- 5-1. Cooperation between the cities and the County shall be strongly encouraged when defining level of service standards.
- 5-2. Appropriately planned circulation system components shall be provided to accommodate development compatible with policies identified in the Land Use Element.
- 5-3. Transportation facilities serving new urban development shall be linked to and compatible with existing and planned roads of adjoining areas, and such facilities shall use presently available public and semi-public rights of way where feasible.
- 5-4. Development shall be allowed only when transportation performance criteria are met and necessary facilities and/or programs are in place or committed to be developed within a specified period of time.
- 5-5. Right of way shall be preserved to meet requirements of the Circulation Element and to serve future urban areas indicated in the Land Use Element.
- 5-6. Encroachment of unsuitable land uses adjacent to abandoned railroad right-of-way shall be prevented where such uses conflict with future uses of the right-of-way identified in the Land Use and Transportation/Circulation Elements.

### Circulation Safety, Convenience and Efficiency

- 5-7. Through-traffic along arterials shall be improved by minimizing the number of new intersecting streets and driveways; and, when feasible, by consolidating existing street and driveway intersections.
- 5-8. Direct frontage and access points on arterials and collectors shall be minimized.
- 5-9. Existing circulation facilities shall be improved and maintained by eliminating structural and geometric design deficiencies.
- 5-10. Development of a secondary road system of expressways shall be considered as part of the solution to congested freeways.
- 5-11. The use of freeways for community circulation shall be minimized by providing sufficient arterials and expressways.
- 5-12. The use of local and collector roadways for neighborhood circulation shall be encouraged.
- 5-13. Physical conflicts between vehicular traffic, bicyclists, and pedestrians shall be minimized.
- 5-14. Adequate lighting shall be provided for vehicular, pedestrian and bicyclist safety, consistent with neighborhood desires.

- 5-15. Curbs and sidewalks shall be provided in appropriate areas.
- 5-16. Emergency response vehicles shall be accommodated in development project design.
- 5-17. The design and the scheduling of improvements to arterials and collectors shall give priority to safety over other factors including capacity.
- 5-18. Efforts shall be made to increase short-term parking for retail uses in areas where it is currently inadequate.
- 5-19. New development (including redevelopment and rehabilitation projects) shall provide adequate off-street parking, or contribute funds and/or institute programs to reduce parking demand.
- 5-20. New subdivisions should be designed to permit convenient pedestrian access to bus transit and efficient bus circulation patterns.

#### Alternative Transportation/Circulation Systems

- 5-21. All efforts to use alternative transportation systems to reduce peak period traffic congestion shall be encouraged.
- 5-22. Use of alternative forms of transportation, especially transit, shall be encouraged in order to provide necessary services to transit-dependent persons and to help minimize automobile congestion and air pollution.
- 5-23. Improvement of public transit shall be encouraged to provide for increased use of local, commuter and intercity public transportation.
- 5-24. Rail transit extensions including protection and acquisition of necessary right-of-way and station areas, shall be encouraged along all freeway corridors.
- 5-25. Planning and provision for a system of safe and convenient pedestrian ways, bikeways and regional hiking trails shall be continued as a means of connecting community facilities, residential areas, and business districts, as well as points of interest outside the communities utilizing existing public and semi-public right-of-way.
- 5-26. Rail transit facilities or additional high occupancy vehicle lanes proposed within a designated transit corridor shall be considered consistent with this General Plan.
- 5-27. Support a study of the I-680 Freeway Corridor for fixed-route transit.

#### Environmental Considerations

- 5-28. New arterial roadways shall be routed around, rather than through neighborhoods, to minimize traffic impacts on residential areas.
- 5-29. Street systems shall be designed and/or modified to discourage additional through traffic in existing residential areas, but not at the expense of efficient bus transit.
- 5-30. Roads developed in hilly areas shall minimize disturbance of the slope and natural features of the land.

- 5-31. Local road dimensions shall complement the scale and appearance of adjoining properties.
- 5-32. Landscaping and maintenance of street medians and curb areas shall be provided where appropriate.
- 5-33. Appropriate buffers, such as soundwalls, bermed embankments, depressed alignments, and open space areas along major transportation facilities, shall be provided adjacent to noise sensitive land uses.
- 5-34. Consolidation of utility/drainage/transportation corridors shall be considered, where appropriate.

## ROADWAY AND TRANSIT IMPLEMENTATION MEASURES

### Circulation Phasing and Coordination

- 5-a. Promote uniform roadway cross-sections and traffic signalization standards between the County and the cities.
- 5-b. The County shall participate on committees with neighboring jurisdictions to monitor traffic congestion on regional corridors and to coordinate the planning, design, funding, and construction of transportation improvements serving unincorporated areas.
- 5-c. The County shall annually adopt a Five Year Capital Improvement Program to establish priorities for and schedule construction of transportation projects in unincorporated areas. The Capital Improvement Program shall contain projects to maintain desired Level-of-Service standards in unincorporated areas in accordance with the Growth Management Element and to accommodate development that has been approved for construction.
- 5-d. The County shall establish and maintain an Area of Benefit program to collect fees on new development for roadway and related transportation improvements specified in the Circulation Element. Fees shall be based on the traffic generated by a use and the costs of transportation improvements necessary to maintain acceptable Levels of Service with the cumulative amount of development authorized by adopted plans.
- 5-e. Establishment of assessment districts shall be encouraged to supplement or replace fees on new development.
- 5-f. The County shall work with the cities to establish regional funding mechanisms to fund regional transportation improvements and to attract state and federal highway and transit revenues. Funding mechanisms may include sales taxes, gas taxes, or fees on new development.
- 5-g. The County shall coordinate its transportation planning efforts with the Contra Costa Transportation Authority.
- 5-h. The County shall work with cities to develop Specific Plans for abandoned railroad right-of-ways that traverse unincorporated areas.
- 5-i. Establish precise alignments plans for new or expanded arterials, expressways and freeways in order to reserve adequate rights-of-way for ultimate road system improvements indicated on the Roadway Network Plan (e.g. Delta Expressway, SR 4, etc).



Circulation Safety, Convenience, and Efficiency

- 5-j. Design local streets so that the widths and curvatures fit the desired speed of travel.
- 5-k. Design a system of local and collector streets within a development to connect residences with arterials, activity centers and adjacent neighborhoods.
- 5-l. Reserve rights-of-way to ensure compatibility with transit service in the design of developments on appropriate freeway, expressway, arterial and collector routes.
- 5-m. Adopt design standards and right-of-way standards with typical sections showing relationships of pavement, median, sidewalks, lighting, and landscaping. Typical sections for roadways shall be based on the following minimum design standards:
  - (1) 12 feet per travel lane;
  - (2) 12 feet per turn lane;
  - (3) 8 feet per shoulder; and
  - (4) Add 4 feet per shoulder if bike lanes are to be provided where parking is allowed.

Alternative Transportation/Circulation Systems

- 5-n. Enforce County TDM (Transportation Demand Management) Ordinances consistent with State law, and encourage neighboring jurisdictions to adopt similar ordinances.
- 5-o. Develop and implement a comprehensive program of park-and-ride lots, in cooperation with the cities, transit agencies, and Caltrans, to serve the demand forecasted by this Plan.
- 5-p. Coordinate efforts with BART to expand parking facilities at or near stations.
- 5-q. Encourage and coordinate efforts with BART to extend train service along State Route 4 to Brentwood and along I-80 to northwestern Contra Costa County.
- 5-r. In cooperation with interested local jurisdictions, regional agencies, and transit operators, conduct a study investigating the feasibility of implementing commuter rail, urban rail, and other regional transit services within the Transit Corridors identified in the Transit Network Plan.
- 5-s. Request MTC, in cooperation with affected local jurisdictions and transit operators, develop a comprehensive plan on the use of the three percent discretionary funds from Regional Measure 1, and include in the Plan a determination of the feasibility of additional ferry operations.
- 5-t. Coordinate efforts with BART, bus operators, and other jurisdictions to reserve rights-of-way, station sites, and other support facilities for rail extensions within the Transit Corridors identified in the Transit Network Plan.
- 5-u. Coordinate efforts with all transit districts serving the county to provide for improved routing, bus frequencies, facilities, and improved design of land development plans.
- 5-v. Expand transit service areas to serve all urbanized portions of the El Sobrante Valley.
- 5-w. Provide safe pedestrian ways in the vicinity of schools and other public facilities, and in commercial areas, and provide convenient access to bus routes.

- 5-x. Construct the bikeways shown in the future Bikeway Network Plan and incorporate the needs of bicyclists in major roadway construction projects and normal safety and operational improvements.
- 5-y. Develop a parking program to maximize traffic flow on new and existing arterials and collectors by reducing or eliminating on-street parking, by providing off-street parking or parking bays to accommodate on-street parking, or enhancing transit or ridesharing services.
- 5-z. Encourage Caltrans to investigate the feasibility and effectiveness of ramp metering on freeways in the County, and if feasible and effective, support implementation.
- 5-aa. Encourage Caltrans to expedite the incorporation of Alameda, Contra Costa and Solano County into the Bay Area Traffic Control System Program to improve the flow of traffic on the region's freeways.
- 5-ab. Encourage Caltrans to construct a system of commuter lanes (high occupancy vehicle or HOV lanes) on new or expanded freeways within the Transit Corridors identified on the Transit Network Plan, and work with the cities and Caltrans in establishing additional commuter lanes on new or expanded expressways and regional arterials.
- 5-ac. Participate with the I-80 Reconstruction Advisory Committee to develop improvements to San Pablo Avenue as a reliever to I-80.
- 5-ad. Encourage Caltrans to construct the I-80 HOV facility for reversible operation, westbound for AM commute and eastbound for PM commute, and provide more opportunities for HOV access and egress along the facility.
- 5-ae. Support the establishment and operation of commuter transit services, serving the Transit Corridors identified on the Transit Network Plan, with emphasis on service to major employment centers and transit stations.
- 5-af. Participate in studies and implementation efforts to improve intercity train service between Contra Costa County and other counties.
- 5-ag. Develop a systematic program of interjurisdictional traffic operations improvements, such as signal coordination, low-cost geometric improvements, parking restrictions, etc.
- 5-ah. Strongly encourage Caltrans to utilize private sector engineering services to expedite State highway projects.
- 5-ai. Design and allow for on-road bikeways on arterials and collectors as an alternative to car travel where this can be safely accommodated.
- 5-aj. Cooperate with MTC in its effort to increase tolls on regional bridges serving the County to help pay for alternative transportation service.

## **5.7 TRANSPORTATION DEMAND MANAGEMENT**

Transportation Demand Management (TDM) is oriented towards encouraging efficient use of existing transportation facilities during peak periods of travel. TDM recognizes that large scale investments in highway and transit facilities are frequently limited by the availability of financial resources and adverse community

reactions. TDM measures usually: 1) involve lower capital costs; 2) provide incentives designed to modify travel demand; 3) are implemented by local government or the private sector, and 4) give all travel modes equal consideration in providing access to development.

The County currently promotes TDM strategies in unincorporated areas through certain County ordinances. Even with an investment of \$860 million in transit facilities, driving alone is likely to remain the choice of most county residents who commute. Additional efforts to revise access requirements for new development are needed to help promote a more balanced transportation system. Specifically, these revisions should investigate: 1) establishment of maximum parking ratios; 2) shifting long-term parking in commercial areas to short-term use; 3) incorporating pedestrian, bicycle, and transit access into site plans.

## 5.8 BIKEWAYS

Bicycles are a viable mode of commuter transportation in the urban areas on either side of the Berkeley Hills and throughout eastern Contra Costa County due to favorable topography and weather. Development of a comprehensive bikeway system within these areas would provide further incentive to commute by bike. A comprehensive bikeway system is defined as a system of bike paths, bike lanes, and bike routes interconnected and spaced closely enough to satisfy the travel needs of most cyclists. Many existing bikeways are of a recreational design combined with pedestrian trails and located off-street. These facilities should be supplemented by on-street commuter bikeways that provide direct access to commercial uses.

"Bikeway" means all facilities that provide primarily for bicycle travel. The following categories of bikeways are defined in the California Streets and Highway Code.

- o Class I Bikeway (Bike Path or Bike Trail): Provides a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized.
- o Class II Bikeway (Bike Lane): Provides a restricted right-of-way designated for the exclusive use or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted.
- o Class III Bikeway (Bike Route): Provides a right-of-way designated by signs or permanent markings and shared with pedestrians or motorists.

In March 1990, the Board of Supervisors formed the Contra Costa Bikeway Plan Advisory Committee to develop a Countywide plan for the development of bikeways. The Committee approved a draft Countywide Bikeway Plan in October 1990. The goals of that plan appear below. The text, map, policies and implementation measures will be adopted as a separate implementing document of the County General Plan.



## BIKEWAYS GOALS

- 5-L. Increase the opportunities for bicycle use in Contra Costa County for transportation as well as recreational purposes.
- 5-M. Develop a coordinated, interjurisdictional Countywide network of bikeways that connect residential areas with major employment, commercial, educational, transit and cultural centers.
- 5-N. Assure adequate long-term maintenance of the bikeway system.
- 5-O. Improve bicycle education for both bicyclists and automobile drivers and promote bicycles as a mode of transportation, particularly for commuting.
- 5-P. Provide secure bicycle parking facilities at appropriate locations and improved access to transit systems.
- 5-Q. Promote bikeway planning and coordination among cities, transit agencies and public utilities.

## 5.9 SCENIC ROUTES

### INTRODUCTION

This scenic routes plan is intended to add considerations of roadway road corridor appearances and aesthetics to the scope of the County General Plan. This plan has two basic purposes: it enables the County to request that the State designate state routes to the State highways program, while at the same time providing a local scenic route implementation program.

Such a plan provides recognition of the perception we have of our surroundings while traveling through the County. Presently Contra Costa County has numerous roadways that pass through areas affording pleasurable views. The number of such roadways where scenic quality exists will diminish, however, unless protected. Their character is changed through improvements to them or when land adjacent to them is developed.

This plan identifies a Countywide scenic route system and ensure that new projects approved along a scenic route are reviewed to maintain their scenic potential. Most scenic routes depend on natural landscape qualities for their aesthetics and many formally designated scenic routes have been established in predominantly rural areas in the past, but neither natural beauty nor rural settings are necessary to the designation of scenic routes.

### DEFINITION AND MAPS OF SCENIC ROUTES

For the purposes of this plan, the following definitions will apply; they should aid in understanding the relationship of the scenic roads to their environs.

A scenic route is a road, street, or freeway which traverses a scenic corridor of relatively high visual or cultural value. It consists of both the scenic corridor and the public right-of-way.

The public right-of-way includes the roadbed and adjacent lands in public control. It includes lands utilized for roadway protection, storm drainage, public utilities, pedestrian travel, and roadside plantings. Usually this land is owned in fee or dedicated to local jurisdictions or the State. It should also include cycling or hiking trails, roadside rests, or turnouts, etc. Public projects in the right-of-way should be designed and carried out recognizing the purpose of this plan.

Semi-public rights-of-way include railroads, canals, or power transmission lines.

A scenic corridor is usually much wider than the road right-of-way and extends to the contiguous areas beyond it. Width of scenic corridors will vary greatly depending upon the present degree of development, land forms, topography, and the nature of scenic quality. The scenic corridor consists of much of the adjacent area that can be seen from the road. It is within this area that development controls, dedication, and the purchase of easements or lands in fee simple will be required, and public projects will be reviewed for compliance with this plan. Controls should be applied to retain and enhance scenic qualities, restrict unsightly use of land, control height of structures, and provide site design and architectural guidance along the entire scenic corridor.

Route 24 from the Alameda County line to the Interstate 680 interchange, and Interstate 680 south of that interchange to the Alameda County line, are existing State designated scenic routes within the State Scenic Routes program. Route 4 from Hercules to the intersection with Railroad Avenue is proposed for State designation as is the proposed State Route 84 to the Delta.

While the State Scenic Routes plan forms the skeletal framework for the County Scenic Routes program, Figure 5-4 identifies the other roadways which form the Countywide scenic routes plan. Inclusion on this map provides direction to local staffs to review projects in a fashion which is compatible with the scenic qualities of these roads.

#### SCENIC ROUTES GOAL

5-R. To identify, preserve and enhance scenic routes in the County.

## SCENIC ROUTES POLICIES

- 5-34. Scenic corridors shall be maintained with the intent of protecting attractive natural qualities adjacent to various roads throughout the county.
- 5-35. The planning of scenic corridors shall be coordinated with and maximize access to public parks, recreation areas, bike trails, cultural attractions, and other related public developments.
- 5-36. Scenic views observable from scenic routes shall be conserved, enhanced, and protected to the extent possible.
- 5-37. The existing system of scenic routes shall be enhanced to increase the enjoyment and opportunities for scenic pleasure driving to major recreational and cultural centers throughout this and adjacent counties.
- 5-38. Multiple recreation use, including trails, observation points, and picnicking spots, where appropriate, shall be encouraged along scenic routes.
- 5-39. Continued efforts shall be made in cooperation with the California Department of Transportation to achieve State scenic route recognition for appropriate routes in the County.
- 5-40. Design flexibility shall be encouraged as one of the governing elements for aesthetic purposes in the construction of roads within the scenic corridor.
- 5-41. For lands designated for urban use along scenic routes, planned unit developments shall be encouraged in covenant with land development projects.
- 5-42. Provide special protection for natural topographic features, aesthetic views, vistas, hills and prominent ridgelines at "gateway" sections of scenic routes. Such "gateways" are located at unique transition points in topography or land use, and serve as entrances to regions of the County.
- 5-43. Aesthetic design flexibility of development projects within a scenic corridor shall be encouraged.

## SCENIC ROUTES IMPLEMENTATION MEASURES

- 5-ak. Develop and enforce guidelines for development along scenic routes to maintain the visual quality of those routes.
- 5-al. Develop a corridor improvement program including an interagency joint action and ordinance development program, to protect and enhance scenic qualities.
- 5-am. Consider the visual qualities and character of the corridor in reviewing plans for new roads, road improvements, or other public projects. This should include width, alignment, grade, slope and curvatures of traffic islands and side paths, drainage facilities, additional setbacks, and landscaping.
- 5-an. Attain development project design flexibility within the scenic corridor through application of the Planned Unit Development District Zoning.





Figure 5-4 Scenic Routes Plan

NORTH  
1"=16,000'

SCENIC HIGHWAYS AND EXPRESSWAYS  
SCENIC ROUTES  
CONNECTING ROADS



## 5.10 AIRPORTS AND HELIPORTS

### INTRODUCTION

The County has one general aviation airport with a second one being funded for development. Additionally, there are several private airfields which operate in the county and requests for heliports have been received from time to time. This section adds policies to the County General Plan which guide the use of airports, private airfields and heliports.

The overall goals and policies for airport and heliport operations in the county are outlined in the next two sections. A more detailed description and policies for Buchanan Field and the East County airport are included in separate sections below. Finally, special policies required by the Airport Land Use Commission are included following the discussion of the two airports. The noise contours for these airports are included within the Noise Element of this Plan.

### AIRPORTS AND HELIPORTS GOALS

- 5-S. To encourage the development and operation of two general purpose public airports in the county.
- 5-T. To allow heliports, restricted to appropriate locations, that would add to the economic well-being and safety of the county.

### AIRPORTS AND HELIPORTS POLICIES

#### Overall Policies

- 5-44. Regulate the location of private airfields and heliports to minimize their impacts on adjacent residents, sensitive receptors, and to ensure public safety.
- 5-45. Protect the Byron Airport environs from urban encroachment through a combination of land acquisition, easement acquisitions and land use regulations.
- 5-46. Work with adjacent cities to ensure that Buchanan Field Airport environs are developed and redeveloped in ways which protect the public safety and maintain the viability of the airport.
- 5-47. Work with the FAA and helicopter operators to minimize conflicts with residential areas and sensitive land uses, such as schools, hospitals, residences, and other sensitive noise receptors.



Policies Regarding Buchanan Field

Buchanan Field is located on a 578 acre site in the unincorporated area of Contra Costa County adjacent to the cities of Concord and Pleasant Hill; a very small portion of airport property is located within Concord. It is a general use airport and has provision for scheduled commuter airline service.

The land use plan designations for this airport are shown on the Land Use Element map. Land uses allowed on the airport property should enhance the airport function and be consistent with its goals and operational requirements. Most of the site is designated "Public/Semi-Public" to reflect the airport use. The County has a certified EIR for Buchanan Airport General Plan Amendment and Related Projects (1989) which allow for modification of the airport with improvement projects.

Special policies of this plan that apply to Buchanan Field are as follows:

- 5-48. The Transportation and Circulation Element requires the construction of the Diamond Boulevard extension from Concord Avenue northerly to Center Avenue as a condition of approval of development projects on the western side of the airport to major new uses.
- 5-49. The Buchanan Field Golf Course exists on the southwest edge of the airport adjacent to the intersection of Concord Avenue and I-680. The road improvements called for by this plan, and in particular the Diamond Boulevard extension, will require modification to the existing golf course. This plan encourages the maintenance of a small golf course or some other recreation facility in the location of the golf course.
- 5-50. Passive recreational uses are appropriate in the approach path of the airport and will constitute an environmental enhancement and balance to serve as amenities for the development at the airport. Some maintenance responsibilities for these recreational facilities may be required of the airport projects.
- 5-51. Trail connections surrounding the airport are required. A riding, hiking and bicycle trail is shown along the Walnut Creek Flood Control Channel. Hiking and bicycle trails are shown flanking the airport on its remaining perimeter. These trails will serve as an amenity to the new office facilities in the area, as well as providing a connection to a regional trail linkage along the Walnut Creek Channel.

East Contra Costa County Airport

The County has developed a new full-service general aviation airport at a site adjacent to the existing Byron Airpark. The project location is approximately three miles south of the town of Byron and 2½ miles north of the Alameda County line. The Byron Highway passes one mile to the northeast. Long range plans call for construction of a runway capable of serving 250,000 operations annually, and construction of parking to accommodate 250 aircraft.

The airport acquisition and development was jointly funded by the County, the State and Federal Governments. The airport boundaries encompass approximately 1,300 acres of which only 230 acres will be developed for airport purposes. In addition to the land to be acquired in fee, an additional 2,000 acres of conservation easements may be acquired to preclude additional residential development and to control noise, height of structures, etc. In addition, aviation easements within two miles of the airport will also be acquired, later if needed, to assist in controlling development.

The expressed intent of the County is to have a second airport free from urban encroachment, and to prevent the establishment of related commercial or industrial development around the planned airport. Water and sewer services will be limited to serve only the airport; utilities will not serve growth on the adjacent properties. It is also for this reason that extra rights-of-way beyond the airport development proper are being acquired. Additionally, no residential development or sensitive receptors, e.g. hospitals, schools, etc., should be allowed within the projected 60 CNEL noise contours for the new airport. (For information only, Measure C - 1990 provides that one of the enumerated bases for changing the Urban Limit Line, upon a 4/5 vote, substantial evidence and public hearing, would be the following finding: (f) an objective study has determined that a change to the Urban Limit Line is necessary or desirable to further the economic viability of the East Contra Costa County Airport, and either (i) mitigate adverse aviation related environmental or community impacts attributable to Buchanan Field, or (ii) further the County's aviation related needs.)

Special policies of this plan that apply to the East County Airport are as follows:

- 5-52. The County shall acquire fee title and/or conservation (development rights) easements to an appropriate amount of buffer land around the planned East County Airport.
- 5-53. The buffer land or conservation easements acquired around the airport shall ensure that incompatible uses will not be allowed to locate within the safety zone.
- 5-54. Establishment of commercial, industrial or residential development around the planned airport shall not be allowed.
- 5-55. Water and sewer services to the airport will be limited to serve only the airport properties; utilities will not serve growth on the adjacent properties.
- 5-56. No residential development or sensitive receptors, e.g. hospitals, schools, etc., shall be allowed within the projected 60 CNEL noise contours for the new airport.

Special Policies Regarding the Airport Land Use Commission

The Public Utilities Code requires that the intent and purpose of adopted Airport Land Use Commission (ALUC) plans and policies be incorporated into the County General Plan. The following policies apply to the two County airports:

- 5-57. Structural heights shall be designated by the Federal Aviation Regulations (FAR) Part 77 surfaces associated with the various runway designations shown on the latest Airport Layout Plan.
- 5-58. The Structural Height Limits defines maximum structural height. Height limits will be placed on new buildings, appurtenances to buildings, all other structures and landscaping in accordance with the Airport Layout Plan except in special instances when for reasons of safety the Commission may impose a more restrictive structural height.

An applicant for any structure within the Airport Land Use Commission Planning Area proposed to penetrate any height limit surface shall submit an aeronautical analysis which specifies the proposed project's effect on airport instrument procedures for all runways, the effect on airport utility, and the effect on overall aviation safety. If, after reviewing the aeronautical study and other related information, it is determined that the proposed project would not have an adverse effect on safety and airport utility then, the project may be approved for heights other than those indicated by the FAR, Part 77, Structural Height Limits.

- 5-59. All projects involving new construction or a building exterior alteration which would increase building height within the Airport Land Use Commission Planning Area and which would exceed the height limits of the structural heights limits plan, which are over two stories in height and within 3,000 feet of the side or end of any runway, or which are within the 60 dBA CNEL noise contour, or which are within the safety zone areas shall be submitted to the Commission for review. Projects which require approval or permit shall be submitted to the Airport Land Use Commission.
- 5-60. New construction or building exterior alterations located in areas of terrain penetration as defined by the ALUC Structural Height Limits Plan will be reviewed on a case by case basis with consideration given to topography, flight patterns, existing vegetation and any other factors which might affect airspace and safety. Maximum building height, including all appurtenances, shall be no greater than 45 feet above maximum ground elevation at the site.
- 5-61. Temporary structures, such as construction cranes or antennae, which would penetrate any adopted height limit surface, may be allowed after a case by case review, provided that obstruction lighting and marking is installed and a two week notice of temporary structure emplacement is provided by the proponent to the County Manager of Airports. Temporary structure emplacement shall be subject to reasonable time limit.
- 5-62. The County may require an exterior building materials reflectivity analysis upon review of the proposed types of building materials, building height, and building location and use on site. Such analyses should be required for development of any structures on or adjacent to public airports which would be over three stories in height and utilize reflective surfaces. Reflectivity studies shall address the potential for pilot and airport operation interference, proposed mitigation to any identified potential interference resulting from reflected sunlight, and any other subject areas related to reflectivity which



the County may deem appropriate. The County may include some or all of the proposed mitigation in its project approval process.

5-63. Within each safety zone designated by the ALUC, the following are incompatible uses (The ALUC Safety Element Map for Buchanan Field Airport is shown on Figure 5-5.):

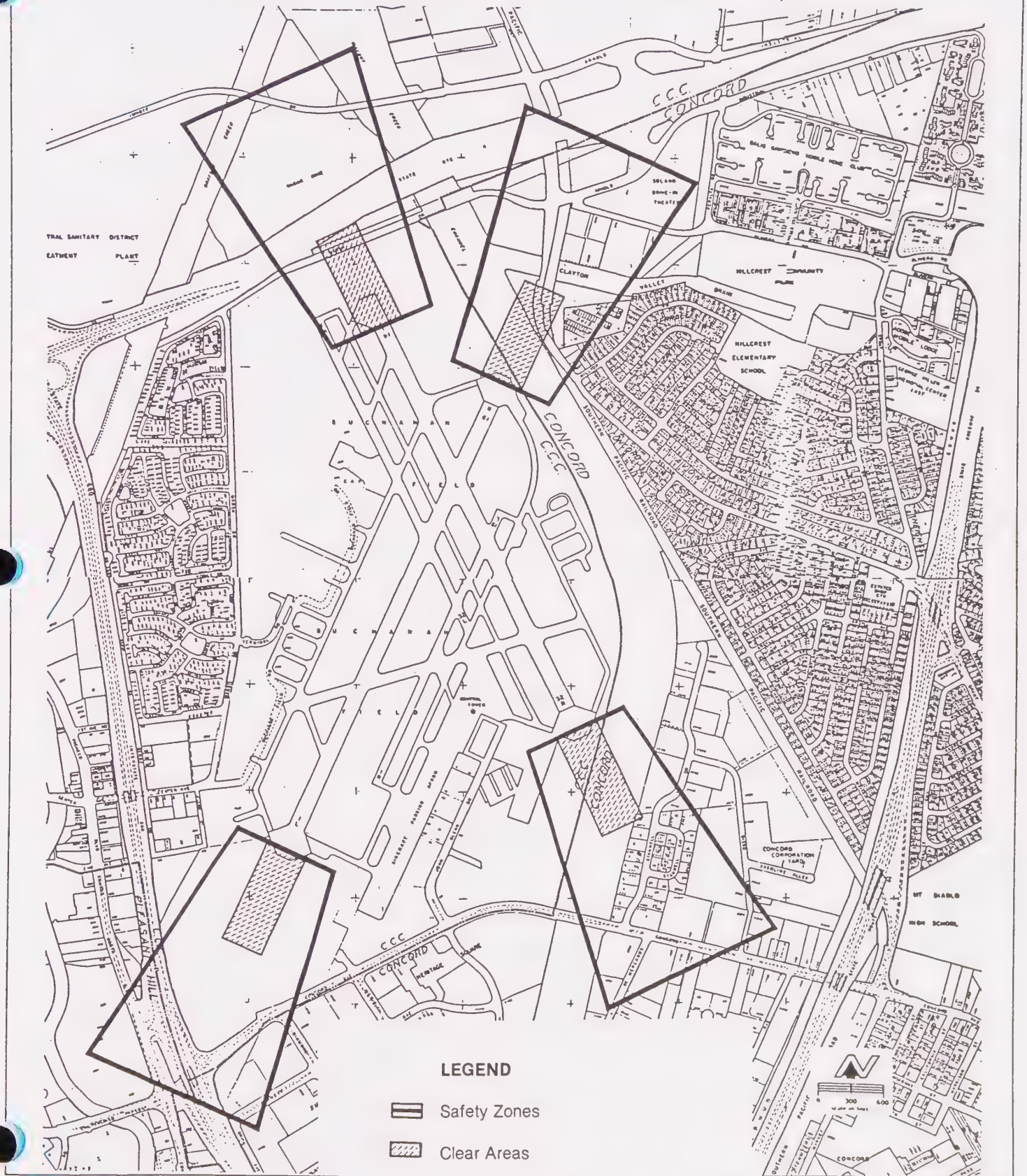
- (1) Any light source which would direct a steady light or flashing light of red, white, green, or amber color associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA approved facility.
- (2) Any construction which would cause sunlight to be reflected toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at the airport.
- (3) Any use which would generate smoke, attract large concentrations of birds, or may otherwise adversely affect safe air navigation within a safety zone.
- (4) Any use which would generate electrical interference that would be detrimental to the operation of aircraft and/or aircraft instrumentation.
- (5) Any use which would utilize or cause to be stored highly toxic, inflammable or otherwise hazardous materials which, in the event of an aircraft accident, could be released into the surrounding environment to threaten human life or property.
- (6) Within the safety zone clear area, any use which involves the erection of a permanent above ground structure other than FAA approved facilities.
- (7) Within the safety zones, excluding the clear areas, any use which on a regular basis would result in a density (excluding streets) in excess of 30 persons per acre or one person/500 square feet of gross building floor area, whichever is less.
- (8) Any of the following uses: new single and multiple family residences, shopping centers, restaurants, schools, hospitals, arenas and other places of public assembly.

5-64. The following are suggested uses within the safety zones (excluding the clear areas) for Buchanan Field:

- (1) agriculture;
- (2) open space;
- (3) warehousing;
- (4) light industry;
- (5) parking of automobiles; and
- (6) low occupant density public uses, such as sewage treatment plants.



Figure 5-5 Buchanan Field Safety Element Map



**CONTRA COSTA COUNTY  
CALIFORNIA**



- 5-65. The following are suggested uses within the safety zones (excluding the clear areas) for the East Contra Costa Airport:
- (1) agriculture;
  - (2) open space;
  - (3) low intensity park and recreation uses;
  - (4) low occupant density public uses; and
  - (5) parking of automobiles.
- 5-66. Airports and heliports may be allowed by issuance of a land use permit in zoning districts found by the Board of Supervisors to be suitable for such uses.

#### AIRPORTS AND HELIPORTS IMPLEMENTATION MEASURES

- 5-ao. Create a new zoning district for County airports similar to the Planned Unit (P-1) District zone which provides for public review of on-site projects, and rezone both airports to that district.
- 5-ap. Review county ordinance code provisions and consider the suitability of each zoning district for the establishment of airports and heliports.
- 5-aq. Continue to regulate all heliports in the county by the land use permit process.
- 5-ar. Create a new zoning district to regulate private land use on the two public airports.
- 5-as. Undertake hearing to rescind the "Airport Zoning Plan for Buchanan Field" adopted in 1955, and to approve preparation of an updated structural height limit plan.
- 5-at. The County shall adopt structural height limit zoning on a permanent basis for the East County airport. The purpose of the zoning is to protect the airspace near the airport for the planned airport operations.
- 5-au. The subdivision ordinance should be amended to require the following actions prior to recording a final map for the ALUC Planning Area:
- (1). Dedication of suitable aviation and noise easements for the area of the particular subdivision;
  - (2). Require the developer to record a covenant or provide other appropriate instruments to notify prospective buyers of lots that the property may be subject to frequent overflight and associated noise impacts.
- 5-av. The General Plan supports preparation, adoption and implementation of a "state-of-the-art" comprehensive land use plan (CLUP) for the East County Airport. The Plan should address public safety, protection of airport airspace and noise/overflight compatibility. The Plan should be formulated under the auspices of the Airport Land Use Commission pursuant to State law. The CLUP should be completed prior to approving any general plan revision to permit nonagricultural open space uses near the airport.
- 5-aw. Any project in an area near the Buchanan Field airport with a designated noise level of 60 BACNEL or greater as shown on the Projected Noise Levels Map shall be required to attach a statement to any deed, lease, rental agreement, or Covenants, Conditions and Restrictions document pertaining to the use of the property. The statement shall indicate that the property is subject to aircraft overflight, and associated noise impacts.

- 5-ax An acoustical study shall be required for any discretionary residential project which the County will consider which is within the area designated on the Projected Noise Levels map to exceed 60 dBA level. The study should be submitted prior to accepting the application as complete and shall be by a certified noise acoustical firm.

## 5.11 PORTS AND PROPRIETARY WHARVES

### INTRODUCTION

Contra Costa has historically been oriented to its waterfront, since the western end of the County is located on San Francisco and San Pablo Bays, and the northern shoreline fronts along the Carquinez Strait, Suisun Bay and the Sacramento San Joaquin River Delta. Industrial development in the county was concentrated along the shoreline, and this legacy remains today with port-oriented heavy industrial uses located in scattered locations from Richmond to Antioch. These industrial uses are important to the county economic base and the continued use of appropriate shoreline areas for heavy industries that rely on water traffic should be protected.

There is one major deep water port in the county, the Port of Richmond, located in that city. In addition, there are several private ports or proprietary wharves, which serve large petroleum refineries and other industrial firms.

### PORTS AND PROPRIETARY WHARVES GOALS

- 5-U. To maintain the economic viability of the county's existing ports, wharves, and shipping lanes.

### PORTS AND PROPRIETARY WHARVES POLICIES

- 5-67. The continued use of existing ports and proprietary wharves shall be recognized and encouraged.
- 5-68. Water-oriented industrial uses which require deep water access shall be encouraged along the shoreline, while other industrial uses which could be located on inland sites shall be discouraged.
- 5-69. New or replacement proprietary wharfs shall be allowed adjacent to industrial use areas, as long as environmental safeguards are followed and public access to the shoreline is provided.
- 5-70. The County shall advocate maintenance of deep water channels at a depth that keeps ocean vessel use viable from San Francisco to the Concord Naval Weapons Station.
- 5-71. The Concord Naval Weapons Station deep water port should be utilized for private port use if the property ever becomes excess government property.

## PORTS AND PROPRIETARY WHARVES IMPLEMENTATION MEASURES

- 5-ay. The County shall continue to work with the Bay Conservation Development Commission, the State Lands Commission, and other appropriate agencies to ensure adequate deep water access is provided to industries along the county's shoreline.
- 5-az. The deep water site at Selby should be reserved for a water-related industrial use.

## 5.12 RAILROADS

### INTRODUCTION

There are four railroad lines which currently carry freight within Contra Costa County. The Southern Pacific railroad line, now owned by the Denver and Rio Grande Western, stretches 60 miles from Richmond to the Alameda County line near Clifton Court Forebay. The SP line is a high speed double track between Richmond and Martinez, and carries by far the most freight traffic of all the railroad corridors in the County. From Martinez, the SP track splits, with one track crossing the river to carry freight up the Sacramento Valley to the northwestern U.S., and one track continuing through Antioch, Brentwood, Byron and into the San Joaquin Valley and points south.

The 55-mile long Atchison, Topeka and Santa Fe (ATSF) railroad corridor roughly parallels the SP line between Richmond and Hercules, where it then turns inland through rural Franklin Canyon running south of Route 4 to the industrial areas east of Martinez. From there it again closely parallels the SP (and Sacramento Northern/Union Pacific) tracks as it passes through Pittsburg and Antioch, and then through Oakley and across the Delta to Stockton. Five daily AMTRAK passenger trains operate on the SP tracks between Richmond and Pittsburg, and on the ATSF tracks between Pittsburg and the San Joaquin County line.

Two smaller freight lines operate in the County. Union Pacific controls the subsidiary Sacramento Northern line from Clyde to Pittsburg, and the Bay Point and Clayton rail line serves the Concord Naval Weapons Station. The other major railroad corridor in the county, the SP tracks running north-south between Concord and through the San Ramon Valley to the Alameda County line, was abandoned in the 1960s and has been largely acquired by the County.

All these lines are directly involved with the economic vitality of the County, since numerous industries depend on the rail movement of heavy goods such as oil and chemical products, coal, lumber, and automobiles, as well as containerized cargo. The importance of railroad lines is further increased by the growing ridership of intercity passenger trains serving the County, and future plans for urban, commuter, and intercity rail



passenger service to provide alternatives to the region's freeway congestion. It is possible, however, that all or portions of these rail lines may be declared unprofitable by their parent companies in the future. As such, a formal petition may be filed with the Interstate Commerce Commission asking permission to abandon the corridors and sell them. This plan, thus, needs to consider alternative land uses for the corridors in the event of any abandonment.

## RAILROADS GOALS

- 5-V. To protect the existing railroad rights-of-way in the county for continued railroad use, utility corridors, roads, transit facilities, trails and other public purposes.

## RAILROADS POLICIES

- 5-72. Railroad rights-of-way shall generally be designated for Public/ Semi-Public uses to reflect their importance to the County's economy.
- 5-73. Encroachments into railroad rights-of-way by urban uses which would impact current rail operations or preclude future use of the corridors for trails or other public purposes shall be limited.
- 5-74. Trails shall be considered an appropriate interim use of an abandoned railroad right-of-way.
- 5-75. Encroachment of unsuitable land uses adjacent to abandoned railroad right-of-way shall be prevented where such uses would conflict with future uses of the right-of-way identified in the Land Use, and Transportation and Circulation Elements.
- 5-76. The Southern Pacific right of way south of Rudgear Road should be limited to utility and non-motorized transportation use only.

## RAILROADS IMPLEMENTATION MEASURES

- 5-ba. Implement County Ordinance #87-19, entitled "Railroad Corridor Combining District", in a fashion which protects the integrity of the existing corridors.
- 5-bb. If railroad right-of-ways are abandoned by railroad service, work toward acquisition of the right-of-ways for trail development, utilities corridors, transit and for other public purposes.
- 5-bc. If railroad uses are to be abandoned, initiate a general plan revision study to determine the best long term use of the right-of-ways.
- 5-bd. Upon notification of an action to abandon a rail line, initiate a committee of affected jurisdictions to help determine the long term use of the rail corridor.









## 6. HOUSING ELEMENT

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## 6. HOUSING ELEMENT

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### 6.1 INTRODUCTION

#### PURPOSE

This chapter of the Contra Costa County General Plan presents goals, policies and other information related to the provision of housing for existing and future residents of the County. The purpose of the Housing Element is twofold: 1) to present specific policies and actions for housing provision, based on the premises and policies of the residential land use component of the County General Plan's Land Use Element; and 2) to provide an adopted County housing plan that will help the County and its political subdivisions to qualify for housing aids and grants.

#### RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

State law contains requirements for Housing Element content that are far more specific than the requirements for other elements of the General Plan. The Housing Element is also unique in that it is the only element that is required to be updated at least every five years.

Contra Costa County adopted a Housing Element in 1985, which was certified by the State Department of Housing and Community Development (HCD). State law requires housing elements to be updated every five years (1995) to demonstrate progress in implementing housing policies from 1985 to 1995 and to establish new housing policies and implementation measures for the next five-year period (1995 to 2000). This Housing Element was therefore prepared in 1995 in order to comply with State law requirements. Further, based upon HCD comments, the Housing Element was further revised in 1992. The Housing Element also incorporates significant new housing market and housing needs data, and incorporates new requirements under State law.

Under State law, the Housing Element must be consistent with other elements of the General Plan. The Housing Element has been developed to be consistent with the other elements of the General Plan, both in format and content.



The Housing Element is specifically intended to set forth and expand upon County policies for residential land uses as defined and described in the Land Use Element of the General Plan. By designating the locations and characteristics of residential areas, and by serving as the basis for land development regulations, the Land Use Element is the central component of the General Plan for relating housing to other General Plan subjects. The following is a very general identification of these relationships.

Residential areas are located according to conditions evaluated in the Open Space/Conservation, Safety and other elements, and will be affected in the future by the ULL. They are further located according to relationships with employment areas, major recreation facilities, and major roads and utilities covered in the Public Facilities/Services; Transportation and Circulation; Land Use; and other elements. The internal design and physical characteristics of residential areas are influenced by building density policies of the Land Use Element; by street patterns reflected in and anticipated by the Transportation and Circulation Element; by Noise Element requirements; and by parks and open spaces addressed in the Public Facilities/Services and Open Space/Conservation Elements, respectively. Moreover, the timing of residential development will be influenced by the ability to satisfy Growth Management Performance Standards.

The General Plan affects housing not only through natural resource and physical design considerations, but also through population (social) characteristics and distributions inherent in the policies of the Land Use Element. Land Use Element policies also address the provision of jobs and local economic development potential. Public services are addressed in several elements, as well as in the studies upon which the elements are based and the public programs that implement the elements.

## ORGANIZATION

This chapter provides a summary of information regarding the County's housing market and housing needs, followed by a statement of the County's goals, policies, implementation measures, quantified objectives, and scheduled programs, as they relate to housing. Two appendices provide the bulk of the background data: an analysis of Contra Costa County's housing market, Appendix A, Housing Market Analysis; and Appendix B, Summary of Federal and State Housing Programs. These three sections constitute the County's Housing Element.

## AUTHORITY AND DEVELOPMENT OF HOUSING ELEMENT

In 1967, the California Legislature mandated that cities and counties include housing elements in their general plans. The State guidelines of the time envisioned a two-stage process for developing comprehensive housing elements. Accordingly, Contra Costa County adopted its Preliminary Housing Element in 1970 as its first



housing element. The next step was the compilation of housing data and housing program information. In 1977, the Planning Department published a Housing Element Background Report that reflected the County's 1975 Special Census and the State's 1977 Housing Element Guidelines. The background report, in turn, was used by the Planning Department and a special Housing Element Advisory Committee to draft an element document for review and consideration in the adoption process. In December 1980, the Board of Supervisors, after numerous public hearings before the Board itself and the Planning Commissions, adopted a County Housing Element as required by the 1977 State Guidelines. In 1980, responding to controversy over the 1977 State Guidelines, the State legislature enacted the California Housing Element Law (Commencing with Section 65580 of the California Government Code). Concurrent with the adoption of the State Housing Element Law was the 1980 Federal Census. The 1980 Census provided new insights into the housing needs that were incorporated into the 1985 Housing Element, along with an analysis of homeless needs required under 1985 State legislation.

Subsequent legislation set forth new requirements for the 1990 Housing Element. A 1985 amendment to State law required localities to identify sites or zones for emergency shelters and transitional housing. Other direction from the State Attorney General's Office in 1987 required that adoption of alternative zoning ordinances and land use restrictions be considered if necessary to meet a locality's fair share of regional housing needs. A 1985 California Court of Appeal case established a new standard for actual versus substantive compliance with the requirements for Housing Elements in the Government Code.

More recent 1989 legislation requires Housing Elements to include by January 1, 1992 additional needs analyses and programs regarding existing low-income housing units, with affordability restrictions through federal, State or local programs, which could convert to market rates.

The requirements of Government Code Section 65583 state that the Housing Element shall consist of an identification and analysis of existing and projected housing needs; and a statement of goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. The Housing Element shall identify adequate sites for housing, including rental housing, factory-built housing and mobile homes, and shall make adequate provision for the existing and projected needs of all economic segments of the community.

The legislation goes on to define the contents of a local community's housing needs assessment. It requires communities to establish goals, objectives and policies related to housing maintenance, improvement and development, and to adopt a five-year housing action program. The legislation also sets forth a procedure for periodic revision and updating of the Housing Element.

## PREPARATION, REVIEW, AND PUBLIC PARTICIPATION

This Housing Element has been updated by County staff, incorporating new data and reflecting new policies proposed by members of the community representing the real estate industry; developers; lenders; the business community; homeowner associations; other localities; service and shelter providers; and advocacy groups for low income, disabled, senior, homeless, and ethnic populations. The updating of the County General Plan, including the Housing Element, was done in conjunction with a 67-member Planning Congress. The Planning Congress held over 100 meetings in the process of developing a recommended update to the County General Plan. This process was closely covered by the media within the County. In addition, notices of the Congress meetings were mailed to over 50 organizations. Prior to formal consideration of the Housing Element before the Planning Commission, a direct notice was provided to over 100 parties who had expressed interest in the County Housing Policy and programs. These revisions include recommendations in an April 1989 report entitled Long Term Affordable Housing Solutions to Homelessness, developed by the Community Homeless Action and Resource Team, and accepted by the Board of Supervisors. The Public Review Draft is available for public review. Public workshops are being held to provide interested people and organizations with an opportunity to inform themselves on the content and requirements for Housing Elements. Public hearings before the County Planning Commission and the Board of Supervisors will follow to provide ample opportunities for public input before the Board of Supervisors adopts the Element.

In view of the dynamic nature of the housing planning process, the County will continually evaluate new programs for their appropriateness and effectiveness in meeting housing goals. The evaluation of the housing program should be conducted on an annual basis coinciding with the preparation of the Housing Assistance Plan and cover the following:

1. Evaluation of the housing program and its effectiveness in accomplishing stated goals;
2. Programs and plans undertaken since the previous update; and
3. Programs and plans discontinued since the previous update.

In addition to the annual review process, the State Housing Element law indicates that the Housing Elements should be revised and a printed update prepared at least every five years. The next scheduled update would be accomplished on or before June 30, 1997.

## 6.2 EVALUATION OF THE COUNTY'S 1985 HOUSING ELEMENT

### 1985 HOUSING ELEMENT GOALS, POLICIES, PROGRAMS, AND OBJECTIVE

The County's 1985 Housing Element included goals, policies, programs, and objectives. Quantified objectives originally presented in the Contra Costa County Housing Program table in the 1985 Housing Element, have been presented for evaluation purposes separately in Table 6-1.

## 1985 HOUSING NEEDS

The Association of Bay Area Governments (ABAG) provided housing need determination for the County unincorporated areas.

## IMPLEMENTATION OF THE 1985 HOUSING ELEMENT

Contra Costa County has combined resources from both the public and private sectors to progress toward the realization of its housing goals. Table 6-2 summarizes the major accomplishments made from 1985 to 1990 in implementing the County's Housing Program in the 1985 Housing Element.

The 1985 County projected housing need for the unincorporated areas was 4,304 units for the period of 1985 to 1990. Tables 6-3 and 6-4 portray the projected housing needs broken down by household income category and housing tenure. The County has far exceeded its goals for meeting the projected housing needs for different income categories particularly for housing affordable to very low and low income households. The County also has far exceeded its 1985 Quantified Objectives for newly constructed and rehabilitated housing financed through the County. The County has not met its goals for funding economic development projects due to the small number of funding requests for these projects. In addition, increasingly stringent federal standards for economic development projects have restricted the use of County Community Development Block Grant (CDBG) funds for these activities.

Table 6-5 presents the number of rental and homeowner units produced, subsidized, or rehabilitated during the five-year period from April 1985 to April 1990. These include affordable units located in County unincorporated areas or funded by Contra Costa County (which includes projects in incorporated areas). The units are broken down by income category for units affordable to very low, low, moderate, and above moderate income households for comparison to projected housing needs for different income groups. New units affordable to very low, low, and moderate income households, either newly constructed or newly subsidized to achieve affordability, totaled 3,392 units. Including rehabilitated units, this number totals 4,901 units. The number of affordable units assisted by the County or provided in unincorporated areas was more than double the need identified for the unincorporated areas by ABAG. The number of affordable units for very low income households fared even better, exceeding the identified need by 182 percent.



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TABLE 6-1  
1985 QUANTIFIED OBJECTIVES

| <u>Policy</u> | <u>Objectives</u>  |
|---------------|--|
| 3b            | Based on 1984 program year, commit at least \$1.6 million, or 50 percent of CDBG <sup>1</sup> funds, annually for housing. |
| 4a            | Provide tax-exempt bond financing for 600 first-time home buyers or 500 apartment renters annually.                        |
| 11a           | Based on 1984 program year, set aside at least \$640,000, or 20 percent of CDBG funds, annually for economic development.  |
| 12a           | Rehabilitate 75 units annually through housing rehabilitation programs for homeowners.                                     |
| 12b           | Rehabilitate 75 units annually through housing rehabilitation of investor-owned (i.e., rental) properties.                 |

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<sup>1</sup>County Community Development Block Grant.

Source: Contra Costa County 1985 Housing Element, Table 4-1, Contra Costa County Housing Program.

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TABLE 6-2  
CONTRA COSTA COUNTY HOUSING PROGRAM  
MAJOR ACCOMPLISHMENTS, 1985-1990

| <u>Policy</u>   | <u>Implementation</u>   |
|---|---|
| 1a-b, 8b, 13b   | Revision of the County's General Plan.  |
| 7a-c, 8a-b, 8d, 11d   | Measure C, adopted by the voters in 1988, provided a \$.05 sales tax for transportation improvements to communities which implement a housing program and jobs/housing balance measures as part of their five-year capital improvement program.   |
| 13b, 1c, 1f, 1h, 1i,<br>3a, 3d, 3e, 3f, 3g,<br>3i, 4a, 4c, 5a, 5b,<br>5f, 7a, 11d, 13e, 13f | Provision of incentives for affordable housing development through use of flexible zoning mechanisms, technical assistance, fee waivers, density bonuses, and public subsidies to achieve affordability in new residential development throughout the County (e.g. Najera Estates, Silvercrest Senior Project). |
| 1d  | Development of surplus County owned sites available for affordable housing development and homeless facilities in 1989 and 1990 (Arthur Road, North Richmond modular emergency shelter).  |
| 1e  | Adoption of the County's Residential Second Unit Ordinance in 1987 and provision of financial assistance to the Duo Program to encourage second unit development.   |
| 2a  | Initiation of review of land use and development review process through coordination of County Community Development, Building, and Public Works Departments in 1990.   |
| 2b  | Assessment of all County development fees associated with residential development in 1989.  |
| 3b  | Commitment of at least 50% of Community Development Block Grant funds for housing and facilities for the homeless annually.   |
| 3g, 7b, 7c, 11d, 13c,<br>13d, 13e, 13f  | Development of affordable housing projects in Pleasant Hill BART and North Richmond Redevelopment areas.  |
| 3h, 13b, 13c, 7b, 7c,<br>13d, 13e, 13f, 13g   | Establishment of four new County Redevelopment Areas in North Richmond and Bay Point in 1987, Oakley in 1989 and Rodeo in 1990. Expansion of the Pleasant Hill BART Station Redevelopment Area to accommodate an affordable housing project.  |

TABLE 6-2 (Continued)

| <u>Policy</u>                                | <u>Implementation</u>  |
|--|--|
| 4a, 13e, 7c                                  | Issuance of \$358,900,000 of County tax-exempt mortgage revenue bond financing could assist nearly 4,400 single-family and multi-family affordable housing units from 1985 to 1990.  |
| 5c, 13b                                      | Preparation of annual Housing Assistance Plans establishing and evaluating annual goals for affordable housing development and preservation.   |
| 5d, 5e, 12g                                  | Pursuit of available State, federal and private sources of financing for affordable housing development and preservation (including McKinney Act funds for homeless, state Emergency Shelter Program, FmHA 533 rehabilitation funds, Community Reinvestment Act Programs).   |
| 5f, 5g                                       | Advocacy for affordable housing development and preservation.  |
| 6a, 6b                                       | Implementation and expansion of rent subsidy programs currently assisting households throughout Contra Costa County.   |
| 7b, 7c, 8c, 8d, 11d, 13a, 13b, 13c, 13d, 13e | Assistance for neighborhood stabilization and revitalization (County funded capital improvement projects, rehabilitation programs throughout the County, Revitalization Studies of Bay Point and North Richmond in 1989/90, Neighborhood Enhancement Programs in Bay Point and North Richmond in initiated in 1990). |
| 8a, 8b, 8d, 13b                              | Adoption of the County's Capital Improvements Plan.  |
| 9a, 9b                                       | Encouragement of energy conservation/efficiency in new and existing residential development through land use requirements, implementation of the County's weatherization and rehabilitation programs.  |
| 6a, 10a, 10b, 10c                            | Support of local agencies providing fair housing assistance and enforcement.   |
| 10a, 10b, 10c                                | Participation in, and provision of and support for, Community Housing Resource Boards to encourage and monitor fair housing practices in the real estate industry.   |
| 11a, 13f                                     | Provision of financial assistance for economic development activities, such as assistance for small business, job training for the homeless and disabled populations, and job creation through commercial/industrial development and programs for the homeless and disabled populations.                             |
| 11a, 11b, 11c                                | Establishment of a new County Economic Development Department to encourage economic development in Contra Costa County initiated in 1990.  |



TABLE 6-2 (Continued)

| <u>Policy</u>                     | <u>Implementation</u>  |
|-----------------------------------|--|
| 11c, 11d                          | Adoption of a County Growth Management Plan as part of this General Plan to propose mitigations for impacts of residential development on public services and facilities and provide a jobs/housing balance in Contra Costa County.  |
| 12a, 12b, 12c, 13c, 13d, 13f, 13g | Implementation and expansion of County rehabilitation programs for lower income households through financial assistance from the County and the capture of State and federal rehabilitation funds such as the federal Rental Rehabilitation Program, Section 312 funds, Farmers Home Administration Funds and Comprehensive Improvement Assistance Program for public housing modernization.   |
| 12c, 11d                          | Assistance for rehabilitation projects such as group homes for mentally disabled.  |
| 1i, 12g, 13e, 14d                 | Assistance to self-help development projects for farmworkers and other lower income household (Najera Estates and Marsh Creek Vista).  |
| 14a, 14c, 14f                     | Development of, and provision of financial assistance to, special housing needs projects such as Shelter Inc.'s Pittsburg Transitional Family Center, Volunteer of America's Transitional Family facility, Phoenix Programs Multi-Service Centers and emergency shelter, Battered Women's emergency and transitional facilities, Winter Relief National Guard Armory Shelter Programs, proposed North Richmond modular emergency shelter, Shell Avenue transitional/emergency shelter facility, Housing for Independent People disabled facilities, sober living group homes, Tri-Counties Women's Recovery Residential facility, Diablo Valley Alcohol Recovery facility, Bi-Bett Teenage Alcohol Recovery facility, group homes for developmentally disabled (Harmony Home, Las Trampas), Byron Park senior project, San Pablo senior housing project, Silvercrest Senior Housing project. |
| 14e                               | Establishment of the Farmworker Housing Task Force to assess and address farmworker housing needs.   |
| 14a, 14f                          | Preparation of annual Comprehensive Homeless Assistance Plans and Performance Reports to establish and evaluate goals to address the needs of homeless populations.  |
| 14a                               | Assistance to local agencies to create shared housing programs.  |
| 6b, 14a, 14f                      | Assistance to local agencies providing emergency rental assistance to the homeless or those at risk of becoming homeless.  |

TABLE 6-2 (Continued)

| <u>Policy</u> | <u>Implementation</u>  |
|---------------|--|
| 14a, 14f      | Participation in local and regional networks to assess and develop strategies to address the needs of homeless populations such as Homebase, Public Advocates, Community Homeless Action and Resource Team, the Homeless Advisory Committee to the County Board of Supervisors, the Homeless Management Team, and the Homeless Operations Committee. |
| 14f           | Establishment of the Housing Bond Trust Fund which has provided funds for transitional and emergency shelter for the homeless.   |

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TABLE 6-3  
DISTRIBUTION OF 1985 PROJECTED HOUSING NEEDS  
(by Income)

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|                | <u>Number</u> | <u>Percent</u> |
|----------------|---------------|----------------|
| Very Low       | 861           | 20%            |
| Low            | 602           | 14%            |
| Moderate       | 861           | 20%            |
| Above Moderate | 1,980         | 46%            |

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TABLE 6-4  
DISTRIBUTION OF 1985 PROJECTED HOUSING NEEDS  
(by Tenure)

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| <u>Owner</u> | <u>Renter</u> | <u>Total</u> |
|--------------|---------------|--------------|
| 3,258        | 1,046         | 4,304        |

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## 6. Housing Element

TABLE 6-5  
CONTRA COSTA COUNTY NEW AFFORDABLE HOUSING PRODUCTION,  
ASSISTANCE, AND REHABILITATION  
(1985-1990)

| Project/Area  | Developer Type                             | Type                                 | Number of Units by Income Level |     |          |        |       | Assisted<br>Total | Total                               | Source of<br>Public Units |
|---|--|--------------------------------------|---------------------------------|-----|----------|--------|-------|-------------------|-------------------------------------|---------------------------|
|   |  |                                      | Very Low                        | Low | Moderate | Market |       |                   |                                     |                           |
| NEW PRODUCTION                                      |  |                                      |                                 |     |          |        |       |                   |                                     |                           |
| Homeownership                                       |  |                                      |                                 |     |          |        |       |                   |                                     |                           |
| Arthur Rd., unincorporated<br>Martinez              | For profit                                 | Family                               |                                 | 4   |          | 37     | 4     | 41                | Density Bonus                       |                           |
| County Mortgage Revenue<br>Bond Program, Countywide | For profit and<br>non-profit               | Family                               | 20                              | 404 | 810      | 0      | 1,234 | 1,234             | MRB, Density<br>Bonus               |                           |
| ATAP, North Richmond                                | For profit                                 |                                      |                                 | 7   |          |        | 7     | 7                 | CDBG,<br>Redevelopment              |                           |
| Najera Estates, Oakley                              | Non-profit                                 | Farmworker<br>Family Sweat<br>Equity |                                 | 56  |          |        | 56    | 56                | Density Bonus<br>FmHA, CDBG         |                           |
| Willowbrook, Pinole                                 | Non-profit/<br>for profit<br>joint venture | Family                               | —                               | 19  | 32       | 159    | 51    | 210               | Density Bonus,<br>CHFA, 1988<br>MRB |                           |
| Subtotal Homeownership                              |  |                                      | 20                              | 490 | 842      | 196    | 1,352 | 1,548             |                                     |                           |
| Rental  |  |                                      |                                 |     |          |        |       |                   |                                     |                           |
| Byron Park, Uninc.<br>Walnut Creek                  | For profit                                 | Senior Congregate<br>Care            | 38                              |     |          | 149    | 38    | 187               | 1989 MRB                            |                           |
| Desco Premiere, Pleasant Hill                       | For profit                                 |                                      | 13                              |     | 19       | 179    | 32    | 110               | Redevelopment                       |                           |

TABLE 6-5 (Continued)

| <u>Project/Area</u>                   | <u>Developer Type</u> | <u>Type</u>       | <u>Number of Units by Income Level</u> |            |                 |               |                       | <u>Total</u> | <u>Source of Public Units</u>         |
|---------------------------------------|-----------------------|-------------------|--|------------|-----------------|---------------|-----------------------|--------------|---------------------------------------|
|                                       |                       |                   | <u>Very Low</u>                        | <u>Low</u> | <u>Moderate</u> | <u>Market</u> | <u>Assisted Total</u> |              |                                       |
| El Cerrito Royale, El Cerrito         | For profit            | Senior            | 30                                     | 21         |                 | 51            | 51                    | 102          | CDBG, Density Bonus, 1987 MRB, Redev. |
| Hidden Cove, Bay Point                | For profit            |                   |  | 88         |                 |               | 88                    | 88           | LIHTC                                 |
| HIP, Pittsburg                        | Non-profit            | Mentally Disabled | 7                                      |            |                 |               | 7                     | 7            | CDBG, HUD, SHURP                      |
| Lakeshore, Antioch                    | For profit            | Family            |  | 54         |                 | 214           | 54                    | 268          | 1985 MRB                              |
| Mission Pines, Martinez               | For profit            | Family            |  | 10         |                 | 52            | 10                    | 62           | 1985 MRB                              |
| Moraga Royale, Moraga                 | For profit            | Senior            | 14                                     | 24         |                 | 57            | 38                    | 95           | 1985 MRB                              |
| Nicole Estates, El Cerrito            | For profit            | Family            | 2                                      | 2          |                 | 16            | 4                     | 20           | 1985 MRB                              |
| Park Meadows, Sonoma                  | For profit            | Family            | 11                                     | 1          |                 | 49            | 12                    | 61           | 1985 MRB                              |
| Park Regency,<br>Uninc. Pleasant Hill | For profit            | Family            | 84                                     |            | 50              | 758           | 134                   | 892          | Redev. 1989 MRB                       |
| Rivershore, Bay Point                 | For profit            | Family            | 35                                     | 14         |                 | 196           | 49                    | 245          | 1985 MRB                              |
| Runaway Bay, Antioch                  | For profit            | Family            | 52                                     | 4          |                 | 224           | 56                    | 280          | 1985 MRB                              |
| San Pablo Senior Housing              | Non-profit            | Senior            | 14                                     | 40         |                 | 224           | 56                    | 280          | CDBG, LIHTC, Redevelopment            |
| Second Units                          |                       |                   |  | 71         | 70              |               | 141                   | 141          |                                       |
| Silvercrest, El Sobrante              | Non-profit            | Senior            |  | 50         |                 |               | 50                    | 50           | CDBG, Density Bonus, 202              |

TABLE 6-5 (Continued)

| Project/Area                                      | Developer Type | Type                         | Number of Units by Income Level |           |            |            |            | Assisted<br>Total | Total              | Source of<br>Public Units |
|---|----------------|------------------------------|---------------------------------|-----------|------------|------------|------------|-------------------|--------------------|---------------------------|
|   |                |                              | Very Low                        | Low       | Moderate   | Market     |            |                   |                    |                           |
| Sycamore Meadows, Antioch                         | For profit     | Family                       | 25                              | 2         |            | 109        | 27         | 136               | 1985 MRB           |                           |
| Twin Creeks, Antioch                              | For profit     | Family                       | 30                              | 26        |            | 184        | 56         | 240               | 1985 MRB           |                           |
| Van Jansee Manor, Brentwood                       | For profit     | Family                       | 4                               |           |            | 9          | 4          | 13                | 1985 MRB           |                           |
| Del Norte Courts, El Cerrito                      | For profit     | Family                       | <u>28</u>                       | <u>—</u>  | <u>—</u>   | <u>108</u> | <u>28</u>  | <u>136</u>        | 1990 MRB           |                           |
| Subtotal Rental                                   |                |                              | 387                             | 407       | 139        | 2,355      | 933        | 3,288             |                    |                           |
| SUBTOTAL NEW PRODUCTION                           |                |                              | 407                             | 897       | 981        | 2,551      | 2,285      | 4,836             |                    |                           |
| NEWLY ASSISTED - EXISTING UNITS                   |                |                              |                                 |           |            |            |            |                   |                    |                           |
| <u>Homeownership</u>                              |                |                              |                                 |           |            |            |            |                   |                    |                           |
| Mortgage Credit Certificate<br>Program, Pittsburg |                |                              |                                 |           | 120        |            | 120        | 120               | MCC                |                           |
| County Mortgage Revenue Bond                      |                |                              | <u>10</u>                       | <u>86</u> | <u>127</u> | <u>—</u>   | <u>223</u> | <u>223</u>        | 1985, 87-89<br>MRB |                           |
| Subtotal Homeownership                            |                |                              | 10                              | 86        | 127        | 0          | 223        | 223               |                    |                           |
| <u>Rental</u>                                     |                |                              |                                 |           |            |            |            |                   |                    |                           |
| Contra Costa Housing Authority                    |                |                              |                                 |           |            |            |            |                   |                    |                           |
| - Section 8 Certificates                          |                |                              | 311                             |           |            |            | 311        | 311               | HUD                |                           |
| - Vouchers  |                |                              | 506                             |           |            |            | 506        | 506               | HUD                |                           |
| Harmony Home, Clayton                             | Non-profit     | Devt. Disabled<br>Group Home | 1                               |           |            |            | 1          | 1                 | CDBG               |                           |
| HIP Concord                                       | Non-profit     | Ment. Disabled<br>Group Home | 1                               |           |            |            | 1          | 1                 | CDBG               |                           |



TABLE 6-5 (Continued)

| Project/Area                                | Developer Type | Type                         | Number of Units by Income Level |     |          |        |  | Assisted<br>Total | Total | Source of<br>Public Units |
|---|----------------|------------------------------|---------------------------------|-----|----------|--------|--|-------------------|-------|---------------------------|
|   |                |                              | Very Low                        | Low | Moderate | Market |  |                   |       |                           |
| Las Trampas                                 | Non-profit     | Ment. Disabled<br>Group Home | 1                               |     |          |        |  | 1                 | 1     | CDBG                      |
| Phoenix, San Pablo                          | Non-profit     | Disabled Group<br>Home       | 1                               |     |          |        |  | 1                 | 1     | CDBG                      |
| Phoenix, Walnut Creek                       |                | Devt. Disabled<br>Group Home | 1                               |     |          |        |  | 1                 | 1     | CDBG                      |
| Subtotal Rental                             |                |                              | 822                             | 0   | 0        | 0      |  | 822               | 822   |                           |
| SUBTOTAL NEWLY ASSISTED                     |                |                              | 832                             | 86  | 127      | 0      |  | 1,045             | 1,045 |                           |
| REHABILITATION                              |                |                              |                                 |     |          |        |  |                   |       |                           |
| Homeowner                                   |                |                              |                                 |     |          |        |  |                   |       |                           |
| City of Pittsburg Rehab Program             |                |                              |                                 | 28  |          |        |  | 28                | 28    | CDBG, HUD                 |
| City of San Pablo Rehab Program             |                | 37                           | 31                              |     |          | 68     |  | 68                |       | CDBG                      |
| Colonia Santa Maria,<br>Brentwood           | Non-profit     | Farmworker<br>Cooperative    | 12                              |     |          |        |  | 12                | 12    | CDBG                      |
| County Rehab Program                        |                |                              | 258                             | 78  |          |        |  | 336               | 336   | CDBG, HUD                 |
| Guadalupe Co-op, Brentwood                  | Non-profit     | Farmworker<br>Cooperative    | 7                               |     |          |        |  | 7                 | 7     | CDBG                      |
| N. H. S., Richmond                          | Non-profit     |                              | 1                               |     |          |        |  | 1                 | 1     | CDBG                      |
| Rural Housing Preservation,<br>East Germany |                |                              | 25                              |     |          |        |  | 25                | 25    | FmHA 533                  |
| Subtotal Homeownership                      |                |                              | 340                             | 137 | 0        | 0      |  | 477               | 477   |                           |

TABLE 6-5 (Continued)

| Project/Area  | Developer Type    | Type              | Number of Units by Income Level |       |          |        |     | Assisted Total | Total | Source of Public Units |
|---|-------------------|-------------------|---------------------------------|-------|----------|--------|-----|----------------|-------|------------------------|
|   |                   |                   | Very Low                        | Low   | Moderate | Market |     |                |       |                        |
| Rental  |                   |                   |                                 |       |          |        |     |                |       |                        |
| BiBett  | BiBett            |                   |                                 | 27    | 30       |        |     | 57             | 57    | CDBG                   |
| City of Pittsburg Rehab Program                         |                   |                   | 42                              | 11    |          |        |     | 53             | 53    |                        |
| Public Housing Modernization                            | Housing Authority |                   |                                 |       |          |        |     |                |       |                        |
| Bayo Vista, Rodeo                                       |                   |                   | 250                             |       |          |        |     | 250            | 250   | CDBG, CIAP             |
| Casa Serena, Bay Point                                  |                   |                   | 50                              |       |          |        |     | 50             | 50    | CDBG, CIAP             |
| Las Deltas, N. Richmond                                 |                   |                   | 226                             |       |          |        |     | 226            | 226   | CDBG, CIAP             |
| Los Medanos, Bay Point                                  |                   |                   | 86                              |       |          |        |     | 86             | 86    | CIAP                   |
| Rental Rehab Program, Countywide                        |                   | 175               | 115                             |       |          |        | 290 | 290            |       | CDBG, RRP              |
| Rubicon Apartments                                      | Rubicon           | Mentally Disabled | 12                              |       |          |        |     | 12             | 12    | HUD                    |
| San Joaquin Apartments                                  | Rubicon           | Mentally Disabled | 8                               |       |          |        |     | 8              | 8     | HUD                    |
| Subtotal Rental   |                   |                   | 849                             | 153   | 30       | 0      |     | 1,032          | 1,032 |                        |
| SUBTOTAL REHABILITATION                                 |                   | 1,189             | 290                             | 30    | 0        | 1,509  |     | 1,509          |       |                        |
| TOTAL NEW PRODUCTION AND NEWLY ASSISTED                 |                   |                   | 1,239                           | 983   | 1,108    | 2,551  |     | 3,330          | 5,881 |                        |
| TOTAL NEW PRODUCTION, NEWLY ASSISTED AND REHABILITATION |                   |                   | 2,428                           | 1,273 | 1,138    | 2,551  |     | 4,839          | 7,390 |                        |
| 1985 UNINCORPORATED COUNTY HOUSING NEEDS (per ABAG)     |                   |                   | 861                             | 602   | 861      | 1,980  |     | 2,324          | 4,304 |                        |
| PERCENT EXCEEDING 1985 HOUSING NEEDS                    |                   |                   | 182%                            | 111%  | 32%      | N/A    |     | 108%           |       |                        |

TABLE 6-5 (Continued)

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Source: Contra Costa Community Development Department

|        |   |       |   |
|--------|---|-------|---|
| CDBG   | = Contra Costa County Development Block Grant   | RRP   | = Federal Rental Rehabilitation Program                 |
| LIHTC  | = Low Income Housing Tax Credits  | SHURP | = Special Housing and Urban Renewal Program             |
| MRB    | = Contra Costa Mortgage Revenue Bond Program  | HCD   | = California Dept. of Housing and Community Development |
| FmHa   | = Farmers Home Administration   | 202   | = HUD Section 202 Program                               |
| Redev. | = Contra Costa Redevelopment Agency   | MCC   | = Mortgage Credit Certificates                          |
| HUD    | = U.S. Department of Housing and Urban Development  | CIAP  | = Comprehensive Improvement Assistance Program          |
| N/A    | = Not applicable. Table does not include all market units, only those within affordable projects. |       |   |

Units listed include assisted affordable units in County unincorporated areas and units assisted through Contra Costa County funds located in both incorporated and unincorporated areas.

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New housing that is affordable to very low income households has been created primarily through County mortgage revenue bond issues, which provided financing for rental development with a set-aside of 20 percent of the units for very low and low income households. The other major source of new funding for housing affordable to very low income households has been the U.S. Department of Housing and Urban Development (HUD) rental assistance programs, namely, Section 8 Certificates and Housing Vouchers. The County's Rental Rehabilitation Program operated by the County Housing Authority has also served primarily very low income households through County CDBG and federal Rental Rehabilitation Program funds. The County Housing Rehabilitation Program has also primarily served very low income homeowners.

New housing production for low-income renters and home buyers has again been achieved through County mortgage revenue bond issues. Other units have been developed through Farmers Home Administration funds and non-profit developing "sweat equity" housing. More recently, State and federal Low Income Housing Tax Credits have financed rental units affordable to households with incomes up to 60 percent of County median income.

The County's single-family mortgage revenue bond financing has provided housing primarily for moderate income households. A new pilot Mortgage Credit Certificate Program administered by the County is expected to primarily benefit moderate income households.

A number of factors have constrained further accomplishments in providing affordable housing in Contra Costa County. Cutbacks of approximately 75 percent in federal funding for lower income housing over the last decade have greatly diminished resources to develop affordable housing. The level of CDBG funds allocated to the County has declined by over 40 percent since 1980 and by almost 15 percent since 1985. In real terms (adjusted for inflation), the level of CDBG funding has declined 65.6 percent over the last decade. In addition to this reduction in available funds, increasing demands for services and emergency shelter for the homeless have eaten into the amount of funds available for permanent housing development. When the County has been able to generate funds for low income housing development through active participation as a mortgage revenue bond issuer, its capacity has been constrained by stiff competition for these funds under federally imposed State volume caps. Uncertainty created by a California Supreme Court ruling prevented the County or the County Housing Authority from pursuing the necessary voter approval to directly develop low income rental housing. However, the Supreme Court has now reversed its 1988 ruling. Another factor is the annexation and incorporation of unincorporated County land, which reduces the availability of land to the County for development purposes.

Other factors have enhanced the County's ability to assist in affordable housing development. The federal 1987 McKinney Homeless Assistance Act provided new funding for a variety of programs to provide emergency shelter, transitional housing, and permanent housing for the handicapped homeless. Two State initiatives have generated a total of \$450 million for affordable housing development and rehabilitation. A number of active non-profit housing corporations have utilized their development expertise, track record, and fundraising capabilities to capture available funds from federal and State housing programs as well as the private sector. Local jurisdictions have also made key contributions by providing land use approvals, in the face of neighborhood opposition, and financial support, from General Funds, CDBG funds, and redevelopment area tax increment dollars, for affordable housing and emergency shelter. The establishment of a County Redevelopment Agency has generated tax increment funds for affordable housing.

### 6.3 EXISTING AND PROJECTED HOUSING NEEDS, 1988 TO 1995

Under Section 65581-4 of the California Government Code, cities and counties are required to make a sustained, serious effort to provide for their appropriate share of the State housing goals and regional housing needs at all income levels, as determined by the local council of governments. Local jurisdictions are given discretion as to how best to address local housing needs given available resources, local market conditions, and political constraints.

The Association of Bay Area Governments (ABAG) is required to calculate each local jurisdiction's share of the existing and projected housing needs for households at all income levels of the San Francisco Bay region for each of the five-year updates of local Housing Elements. ABAG must take the following factors into account: market demand for housing; employment opportunities; availability of suitable sites and public facilities; commuting patterns; type and tenure of housing need; and the housing needs of farmworkers. The fair share calculations are adjusted to avoid impactation of localities with high proportions of lower income households.

In consultation with local government, ABAG developed a series of mathematical expressions that attempted to "model" the regional housing market, recognizing the limitations of the available data. (These included relying on 1980 census data for existing jurisdictional boundaries, along with the service areas and/or city spheres of influence used in ABAG's Projections '87.) The series is referred to as the ABAG Housing Needs Model. Pursuant to a California Attorney General's opinion, ABAG now makes housing needs determinations that examine the potential for residential development at higher densities than currently allowed under local zoning ordinances, if potential development under current zoning would not adequately address housing needs.

ABAG's Housing Needs Determinations, published in January 1989, included the existing housing need as of January 1, 1988 and the projected need for the 7-¼-year period, from 1988 to April 1, 1995 for each city and county (unincorporated areas) by four income categories: very low, low, moderate, and above moderate. ABAG's housing needs determinations for the County unincorporated areas represent the "fair share" responsibility for the County. The "existing need" determination estimates the total number of units needed to bring vacancy rates to a healthy 4.5 percent, which would allow normal turnover in a market where the supply of housing is in equilibrium with demand. "Projected need" includes existing need, as well as the number of additional units required to accommodate future household growth, along with housing demands from the local labor supply within each jurisdiction. "Projected need" is broken down into two time periods: 1988 to 1990 and 1990 to 1995.

ABAG's projected need for the unincorporated area of Contra Costa County from 1988 to 1995 is 6,447 units, which ABAG determined could be accommodated without changes to existing zoning ordinances or policies. The total projected need for the entire County (cities and unincorporated areas) is 48,756 units, 42,309 of which are the "fair share" of the County incorporated areas (see Table 6-6).

State law requires ABAG to determine housing needs for all income levels so that each jurisdiction can provide for its "fair share" of housing for each income group. ABAG uses the income categories of "very low" for household incomes up to 50 percent of median income for the region as determined by the Census Bureau in 1980; "low" for 51 to 80 percent of median income; "moderate" for 81 to 120 percent of median income; and "above moderate" for a household income greater than 120 percent of the regional median income.

Based on the distribution of households in different income categories, reported in the 1980 Census, ABAG compares each jurisdiction's housing needs for each income group to a regional distribution. In the Bay Area, 23 percent of the households were very low income, 16 percent were low, 21 percent were moderate, and 40 percent were above moderate income. In contrast, Contra Costa County's countywide income distribution was 20 percent very low income, 14 percent low, 20 percent moderate, and 46 percent above moderate income.

ABAG averages regional, county and city (if applicable) distributions of income levels to calculate each jurisdictional housing needs determination, to achieve a more equitable distribution of housing opportunities and to avoid increased impactation of communities with high concentrations of lower income households. Contra Costa County's fair share responsibilities to provide affordable housing to lower income households in its unincorporated areas have been increased somewhat as a result of this process, as presented in Table 6-7.



ABAG applies the income category distribution to each jurisdiction's total projected housing need to calculate the housing needs for each income category in that area (see Table 6-8). Tables 6-9 and 6-10 show the projected County housing need by tenure; and purchase price and rental cost; respectively. Contra Costa County unincorporated area projected housing need for the period 1988 to 1995 as of January 1, 1988, was 1,289 units affordable to very low income households, 903 affordable to low income households, 1,289 affordable to moderate income households, and 2,966 affordable to above moderate income households. In summary, 3,481 units affordable to very low, low and moderate income households are needed in County unincorporated areas to achieve a healthy housing market. The majority of the need for housing affordable to low very, low and moderate income households in Contra Costa County is in its incorporated areas. The County will continue to rely on many of the same resources utilized in the 1985-1990 period to address housing needs. Since 1988 the County has produced 172 very low income units and 576 low income units. Therefore, the adjusted housing needs as of December, 1992 are 1,117 units and 327 units in the very low and low income categories respectively.

The County has learned during that period, however, that federal and State resources are continuing to diminish, and the County will have to place increasing reliance on local resources used in partnership with non-profit and private sectors. Given federal deficits and priorities, the County does not anticipate substantial increases in direct federal funding of housing activities. Federal resources may be subject to a different allocation method in which local control becomes more prominent. This can only enhance the opportunities to use the scarce federal resources in a more optimal manner.

Availability of State resources are also likely to be scarce. Resources are more likely to be available during the early years of the 1990-1995 time period of this Housing Element. Recent initiatives for additional financing of housing activities have not been approved by voters. Therefore, the availability of funds after 1991 may be limited. The ability of the County to generate its own resources through the issuance of tax exempt bonds is continually being diminished or potentially eliminated by changes in federal tax law. The ability to provide home ownership opportunities through the issuance of Single Family Bonds or Mortgage Credit Certificates is now scheduled to terminate on December 31, 1992. Renewal efforts may be difficult to achieve. The issuance

of Multi-Family Bonds, which was a major vehicle for the financing of affordable rental housing projects in the mid-1980s, is increasingly difficult because of additional restrictions placed in federal law in 1986. Nonetheless, the County has been successful at issuing bonds for five new projects since that date.

In addition, the ability to use this type of financing and the low income housing tax credit program is fairly limited in this County due to the relatively high land and development costs and the high market rents. Hence, projects that utilize such financings typically require additional forms of public assistance. Tax-exempt financing may reemerge in more significant form as a financing vehicle for projects owned by non-profit organizations. Recent tax law amendments provide specific authorization for qualified 501(c)(3) bonds while this may represent an emerging opportunity it may require significant public participation.

TABLE 6-6  
EXISTING AND PROJECTED HOUSING NEEDS  
CONTRA COSTA COUNTY AND CITIES  
1988-1995

|                      | <u>Existing<br/>Need</u> | <u>Projected<br/>Need<br/>1988-90</u> | <u>Projected<br/>Need<br/>1990-95</u> | <u>Alternative<br/>Zoning<br/>Projected<br/>Need</u> | <u>Total<br/>Projected<br/>Need</u> |
|----------------------|--------------------------|---------------------------------------|---------------------------------------|--|-------------------------------------|
| Incorporated Areas   | 2,959                    | 13,271                                | 25,207                                | 3,831  | 42,309                              |
| Unincorporated Areas | 911                      | 2,627                                 | 3,820                                 | 0  | 6,447                               |
| County Total         | 3,870                    | 15,898                                | 29,027                                | 3,831  | 48,756                              |

Source: ABAG, Housing Needs Determinations, January 1989.

TABLE 6-7  
EXISTING AND AVERAGED INCOME PERCENTAGES  
BAY AREA, COUNTY AND UNINCORPORATED AREAS

|                | <u>Very Low</u> | <u>Low</u> | <u>Moderate</u> | <u>Above<br/>Moderate</u> |
|----------------|-----------------|------------|-----------------|---------------------------|
| Regionwide     | 23              | 16         | 21              | 40                        |
| Unincorporated |                 |            |                 |                           |
| Actual         | 18              | 13         | 19              | 50                        |
| Averaged       | 20              | 14         | 20              | 46                        |
| County Total   | 20              | 14         | 20              | 46                        |

Source: ABAG, Housing Needs Determinations, January 1989.



TABLE 6-8  
PROJECTED HOUSING NEED BY INCOME CATEGORY  
CONTRA COSTA COUNTY AND CITIES

| <u>Jurisdiction</u>  | <u>Total<br/>Projected<br/>Need</u> | <u>Very<br/>Low</u> | <u>Low</u> | <u>Moderate</u> | <u>Above<br/>Moderate</u> |
|----------------------|-------------------------------------|---------------------|------------|-----------------|---------------------------|
| Antioch              | 6,343                               | 1,395               | 951        | 1,395           | 2,602                     |
| Brentwood            | 1,905                               | 476                 | 343        | 381             | 705                       |
| Clayton              | 241                                 | 39                  | 29         | 39              | 134                       |
| Concord              | 3,923                               | 785                 | 628        | 824             | 1,686                     |
| Danville             | 2,444                               | 391                 | 293        | 440             | 1,320                     |
| El Cerrito           | 722                                 | 152                 | 108        | 144             | 1,156                     |
| Hercules             | 2,181                               | 349                 | 262        | 414             | 1,156                     |
| Lafayette            | 333                                 | 63                  | 43         | 60              | 167                       |
| Martinez             | 1,745                               | 366                 | 244        | 349             | 786                       |
| Moraga               | 958                                 | 163                 | 125        | 172             | 498                       |
| Orinda               | 269                                 | 43                  | 32         | 46              | 148                       |
| Pinole               | 769                                 | 146                 | 108        | 161             | 354                       |
| Pittsburg            | 3,910                               | 899                 | 587        | 860             | 1,564                     |
| Pleasant Hill        | 1,529                               | 306                 | 229        | 321             | 673                       |
| Richmond             | 4,823                               | 53                  | 280        | 1,553           | 2,937                     |
| San Pablo            | 278                                 | 75                  | 47         | 58              | 98                        |
| San Ramon            | 7,669                               | 1,227               | 920        | 1,457           | 4,065                     |
| Walnut Creek         | 2,267                               | 453                 | 340        | 453             | 1,021                     |
| Unincorporated Areas | 6,447                               | 1,289               | 903        | 1,289           | 2,966                     |
| Countywide           | 48,756                              | 8,670               | 6,472      | 10,416          | 23,198                    |

Source: ABAG, Housing Needs Determinations, January 1989.

TABLE 6-9  
PROJECTED HOUSING NEED BY TENURE  
(UNINCORPORATED COUNTY)

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| <u>Owner</u> | <u>Renter</u> | <u>Total</u> |
|--------------|---------------|--------------|
| 4,255        | 2,192         | 6,447        |

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TABLE 6-10  
PROJECTED HOUSING NEED BY  
PURCHASE PRICE AND RENTAL COST

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| <u>Income<br/>Category</u> | <u>Number<br/>of Units</u> | <u>Purchase<br/>Price<sup>1</sup></u> | <u>Rent<br/>Levels<sup>2</sup></u> |
|----------------------------|----------------------------|---------------------------------------|------------------------------------|
| Very low                   | 1,289                      | Less than \$55,000                    | Less than \$560                    |
| Low                        | 903                        | \$55,000-88,000                       | \$560-880                          |
| Moderate                   | 1,289                      | \$88,000-132,000                      | \$880-1,300                        |
| Above moderate             | 2,966                      | Above \$132,000                       | Above \$1,300                      |

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<sup>1</sup> 2.5 times.

<sup>2</sup> Affordable to family of four based on 30 percent of HUD 1990 median income figures for Oakland PMSA (Alameda and Contra Costa Counties).

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The decade of the 1990s should also represent a period in which the County's investment in the redevelopment process will begin to provide meaningful resources, particularly in the housing area. The County has adopted redevelopment plans for five unincorporated communities. Those areas will begin to generate significant tax increments during the decade of the 1990s and a relatively significant amount of financial resources will be available for housing that were not available in the prior planning periods.

#### 6.4 CONTRA COSTA COUNTY HOUSING MARKET

Contra Costa County is part of the larger Bay Area housing market. The County includes several sub-markets within its boundaries, which are determined by a combination of topography; historical development patterns; and social and economic phenomena. The County is large and diverse but can be divided into three primary sub-areas; West County, which is highly urbanized with a developed industrial base; Central County, which is a rapidly urbanizing community with much new office and light industrial development; and East County, which was primarily agricultural but which is now experiencing considerable residential development. Central and East County have been further subdivided. Central County is composed of North Central County, Lamorinda, and the San Ramon Valley. East County can be further separated into Pittsburg-Antioch and Other East County areas.

West County includes the cities of El Cerrito, Richmond, San Pablo, Pinole, and Hercules, as well as the unincorporated communities of Kensington, El Sobrante, Rodeo, Crockett, and Port Costa.

Central County includes the Lamorinda area (the cities of Lafayette, Moraga, and Orinda, as well as the unincorporated area of Canyon); North Central County, which takes in all of the cities and unincorporated communities along the northern Interstate 680 corridor (the cities of Walnut Creek, Concord, Clayton, Pleasant Hill, and Martinez and the unincorporated areas of Pacheco, Vine Hill, Clyde, the Pleasant Hill BART station, and Saranap); and the San Ramon Valley (unincorporated Alamo, the cities of Danville and San Ramon, and the unincorporated Blackhawk and Tassajara areas).

East County includes the fast growing Pittsburg-Antioch area, which stretches along Route 4 from the Willow Pass grade northeast of Concord to Route 84 near Oakley. The Pittsburg-Antioch area includes the two cities, as well as the unincorporated community of Bay Point.

The term "Other East County" refers to the remainder of the East County sub-area, which includes the city of Brentwood, and the unincorporated areas of Oakley, Bethel Island, Knightsen, Byron, and Discovery Bay.



A detailed presentation and analysis of the social and structural characteristics of the County housing market is included as Appendix A to the County General Plan. A brief statistical profile of the County and its sub-areas (see Figure 6-1) is provided in Table 6-11. The analysis presented in Appendix A provides some interesting insights into the dynamics of the Contra Costa County housing market. This section summarizes the major trends and factors affecting the County housing market.

## 6.5 SPECIAL HOUSING NEEDS

### VERY LOW AND LOW INCOME HOUSEHOLDS

According to ABAG estimates, 20 percent of Contra Costa households have very low incomes and 14 percent have low incomes. Based on January 1990 population figures and ABAG 1990 household estimates, this means that 60,738 households and 160,586 people are very low income and that 42,517 households and 112,410 people are low income.

Within these populations are the working poor, those on public assistance, and the homeless. Contrary to stereotypes of low income families as single mothers on welfare, this population is comprised primarily of the working poor. Based on HUD 1990 estimates of low income levels for Contra Costa County (see Table 6-12), this population includes households with incomes up to \$24,700 to \$35,300 for one- to four-person households. These income levels include occupations such as teachers, policemen, etc. Even very low income households, with incomes up to within \$15,750 and \$22,500 for one to four persons, include the employed. At the current minimum wage rate, a two-worker family with children would be very low income even when both parents are employed full-time. Full-time minimum wage employees only earn \$8,840 per year.

According to the most recent Housing Assistance Plans for Contra Costa County and the Entitlement Cities, there are 28,464 lower income households in need of rental assistance in the County.

According to the County Social Services Department and the Social Security Administration, there were 14,633 Assistance to Families with Dependent Children (AFDC), 4,661 General Assistance, and 4,014 Social Security cases in August 1990. Of the AFDC assisted families, 560 required homeless assistance.

Very low and low income households have the greatest need for affordable housing. These households are most likely to be spending more than 30 percent of their incomes for housing, which could adversely affect their ability to pay for other necessities such as food or medical care. This population is most vulnerable to rent increases and has the most difficulty paying initial move-in costs for rental units, such as security deposits and

last month's rent, and therefore is the most at risk of becoming homeless. Very low and low income households may also have difficulty obtaining affordable housing because they do not have established credit histories.

In 1980, federal funding and local government project administration helped add 150,000 units of public and privately owned housing to the nation's affordable housing stock. By 1988, the production had dropped to 19,000 units per year for the entire country. While overall federal funding for lower income housing has been cut by over 75 percent over the last decade, federal funding for new and rehabilitated housing has been cut by 90 percent since 1981. In tight housing markets such as Contra Costa County's, the lack of supply of affordable housing is a substantial cause of the affordability problem.

Since 1974, the United States lost 2 million units of unassisted low and moderate rent housing to abandonment, demolition, conversion to higher rent units, or conversion to condominium housing. Between 1974 and 1983, while the supply of high-rent housing increased 49 percent, the supply of low-rent housing fell 9 percent. To further aggravate the problem, the passage of the Tax Reform Act of 1986 has resulted in cutting the production of new multi-family housing units by 50 percent nationwide.

This tremendous reduction in production of affordable housing units is occurring while the demand for low-income housing is increasing. Only one in four eligible low-income households benefits from a federal housing program. Housing authorities throughout the country have long waiting lists for its public housing and Section 8 Certificates programs. In Contra Costa, the County Housing Authority has a waiting list of 2,729 low-income families for its public housing program and over 3,000 on the waiting list for the Section 8 Certificates and Housing Voucher program. Because of the overwhelming demand for Section 8 rental assistance, the waiting list for the Section 8 Certificates and Housing Voucher program had been closed for nearly three years, and no new applications have been taken during this period.

The Section 8 certificates and housing vouchers programs are also in jeopardy. Expiring Section 8 contracts need to be extended each year by the federal government. Nationwide, Congress needs to appropriate \$7.2 billion to refund contracts expiring this year alone. In Contra Costa County (not including Richmond and Pittsburg), contracts for 3,700 units could expire next year. Housing vouchers, currently received by 550 families in Contra Costa County, also need to be extended every five years (not including those in Richmond and Pittsburg).





Figure 6-1 Sub-Areas of Contra Costa County

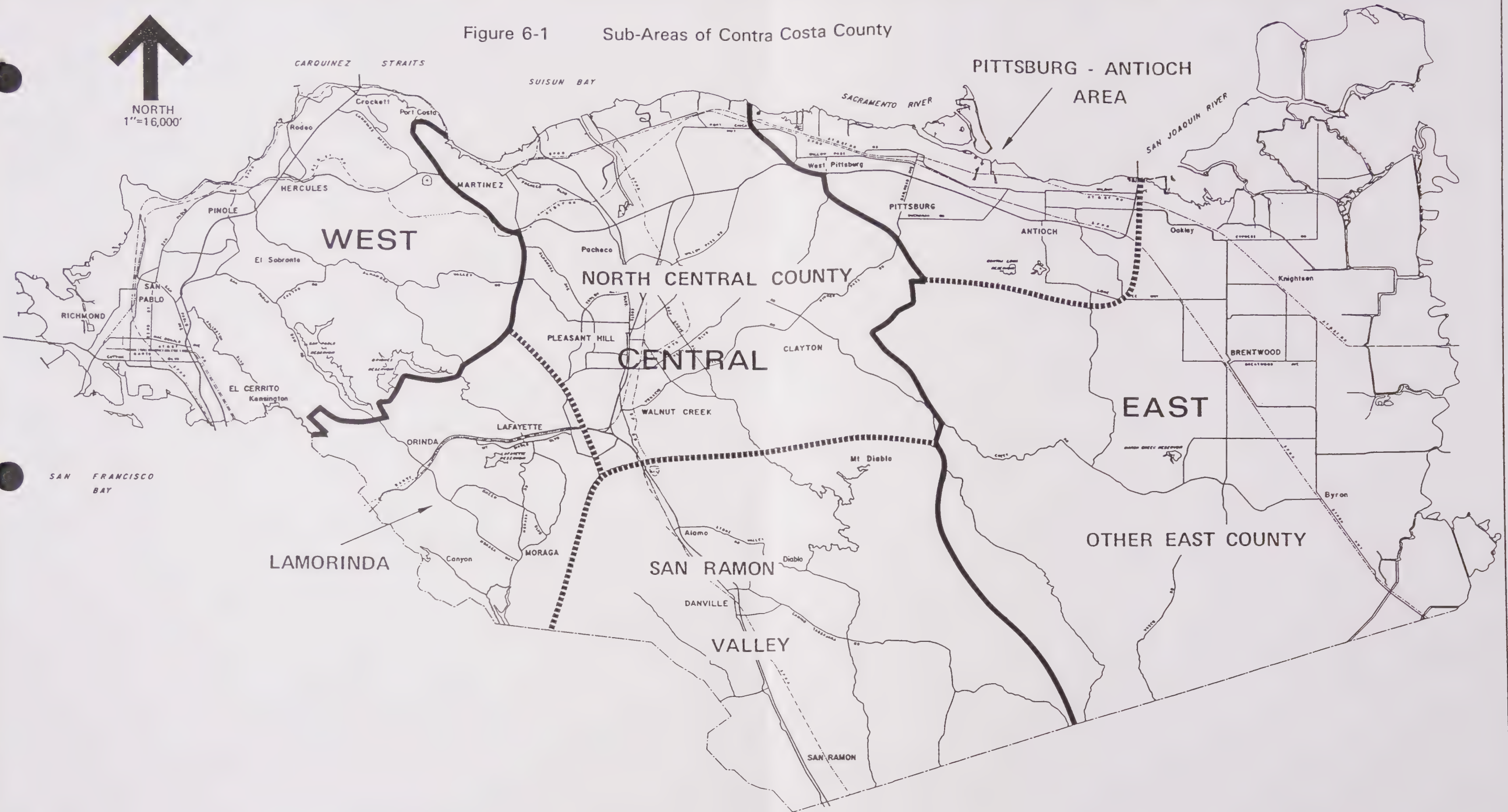


TABLE 6-11 (Continued)

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<sup>1</sup> Contra Costa County Community Development Department, August 1990.

<sup>2</sup> 1980 U.S. Bureau of the Census.

<sup>3</sup> Contra Costa County Community Development Department, November 1989, for 2 bedroom apartments.

<sup>4</sup> California Association of Realtors, May 1989.

Source: California Department of Finance as of January 1, 1990, unless otherwise noted.

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TABLE 6-12  
1990 MEDIAN INCOME LEVELS

| <u>Household Size</u> | <u>Very Low</u> | <u>Low</u> | <u>Moderate</u> |
|-----------------------|-----------------|------------|-----------------|
| 1 Person              | \$15,750        | \$24,700   | \$37,100        |
| 2 Person              | 18,000          | 28,250     | 42,350          |
| 3 Person              | 20,250          | 31,750     | 47,650          |
| 4 Person              | 22,500          | 35,300     | 52,900          |
| 5 Person              | 24,300          | 37,500     | 56,200          |
| 6 Person              | 26,100          | 39,700     | 59,500          |
| 7 Person              | 27,900          | 41,950     | 62,800          |
| 8 Person              | 29,700          | 44,150     | 66,200          |

Source: U.S. Department of Housing and Urban Development figures released February 1990 for Oakland PMSA (Alameda and Contra Costa Counties) based on a median income of \$44,100 for a family of four.



The shortage of housing affordable to very low and low income households is expected to be exacerbated as publicly assisted or subsidized low income rental housing is threatened with conversion to market rate rent levels or to other uses. A problem facing communities nationwide is that of owners of federally assisted low income rental projects prepaying mortgages and terminating rent subsidies. Under many prior federal rental construction subsidy programs, for-profit owners can usually repay mortgages after 20 years. Later new-construction programs allow owners to opt out of the program every five years. As changes in federal tax legislation have decreased the availability of tax shelters or as tax shelters expire, participation in federal subsidy programs has become less attractive to many owners of well-maintained buildings in areas with high market rents. The result is that owners can raise rents to market levels or convert to condominiums or other uses and involuntarily displace the low income residents.

In addition, over 3,000 units have been financed by the County and local cities in Contra Costa County through the issuance of tax-exempt bonds. Projects financed prior to 1986 have ten-year terms for affordability that will terminate in the mid 1990s. Projects financed after 1986 (1987-1990) have 15-year terms, due to expire by the year 2005.

A U.S. General Accounting Office prediction gives an indication of the magnitude of the problem nationwide. They estimate that 1.8 million federally assisted rental units may be lost by the year 2000, or 90 percent of all such units. Contra Costa County could lose 4,461 low income units by the year 2005, according to a list developed by the California Coalition for Rural Housing Project and California Housing Partnership, based on a HUD database of all low income rental units subject to termination of federal mortgages or rent subsidies.

In Contra Costa County, a total of 2,323 units could convert by the year 1995, 514 of which are occupied by senior or handicapped. Forty-two units (6 in Concord and 36 in Walnut Creek) have already converted to market rates.

The profile of the prototype project likely to convert from subsidized to market rate rents reads like a description of Contra Costa County projects:

- o suburban or rapidly urbanizing urban area;
- o good location/good condition to command market rents;
- o market exhibiting substantial growth, escalating housing costs, and low vacancy rates;
- o project rents lower than comparable market rents; and
- o tax shelter exhausted (via use of accelerated depreciation or lost through tax reform).

Federal legislation has helped to slow down the potential conversions on an interim basis. In 1986, a moratorium was placed on mortgage prepayments under the FHA Section 515 program. Subsequent legislation, the Federal Housing and Community Development Act of 1987 prohibited owners of low income housing from prepaying HUD below market-rate mortgages without HUD's approval of a Plan of Action. These plans are required to demonstrate that the low income residents will not be displaced or experience economic hardship as a result of the conversion. While the legislation intended to provide financial incentives for owners to maintain low income affordability, the necessary funding was not approved. Without the necessary federal funding to preserve these low income units, much of the burden may be placed on local communities to use the funds they have available.

California has established the California Housing Partnership to encourage the joint participation by State and local governments, non-profits, and the private sector to preserve these threatened units at affordable rent levels. States and local jurisdictions have explored legislative remedies to the problem, including (1) extended noticing requirements of a project owner's intention to convert; (2) first right of refusal for a local jurisdiction, Housing Authority, or non-profit corporation to purchase the project; (3) relocation assistance for the displaced tenants; and tax incentives for sale of the project to a non-profit that would preserve the affordability over the long term.

In 1989, the County's Community Homeless Action Resource Team recommended to the County Board of Supervisors that an Affordable Housing Preservation Project be established to research and propose means by which the County and the cities can use their existing financing capabilities, taxing and/or regulatory authority, and staff capabilities to further help avert or mitigate the loss of affordable rental housing. The Affordable Housing Preservation Project could include County and city representatives, as well as representatives of non-profit organizations, tenants and private owners. Suggested areas of local involvement may include, but are not limited to:

- a. Developing/maintaining an inventory of affordable rental housing projects;
- b. Developing an early warning system to identify projects most likely to convert to market rate;
- c. Monitoring compliance with federal and State requirements governing conversion, including determinations of economic hardship, displacement and the supply of affordable housing;
- d. Facilitating sale of the projects to new owners or refinancing that will result in maintained affordability;
- e. Encouraging and facilitating the acquisition of at-risk projects by non-profit organizations by utilizing local resources (CDBG, tax-exempt bonds, development agency housing funds, etc.) in combination with federal and State resources;

- f. Providing technical assistance to troubled projects to avert conversions resulting from problems associated with project operations or management;
- g. Considering use of taxes and exactions to create incentives to maintain affordability or disincentives to conversion; and
- h. Considering land use and rent measures designed to preserve affordable housing, such as:
  - o local notification requirements;
  - o rent moratoriums following conversions;
  - o annual limits on number of units that can convert;
  - o relocation plans and assistance requirement;
  - o conversion permit requirement;
  - o conversion impact plans requirement, including mitigation;
  - o requirement for conformance to current zoning regulations in order to convert;
  - o establishment of top priority provided to preservation of existing low income housing in Housing Element and local implementation programs.

Recent State legislation (SB 1282, 1989) requires all housing elements to include by January 1, 1992 additional needs analysis and programs regarding existing assisted rental housing developments that are eligible to change to non-low income housing uses during the next ten years, due to termination of subsidy contracts, mortgage prepayment, or expiration of use restrictions. These "assisted housing developments" include multi-family rental housing assisted through federal programs; State and local multi-family mortgage revenue bond programs; and local inclusionary, redevelopment and density bonus programs.

Another solution to the housing needs of very low income households are decent, affordable Single Room Occupancy (SRO) hotels. SROs are hotels or rooming houses that provide a single room, without individual bathrooms and/or kitchens. These units may have shared kitchens, bathrooms, or other common facilities which could accommodate social services for the residents. While these hotels are generally older buildings in need of rehabilitation, many communities are accessing State and federal funds to develop new SROs to address special housing needs, particularly those for semi-independent living with support services. While SROs may be the only housing affordable to many, they provide the housing of choice for some people, such as seniors and special user groups. Although there is currently little information available on existing SROs in the County, local communities can take measures to preserve existing SROs, as well as to provide funding for rehabilitation or new development of SROs.

## ELDERLY

In 1980, 9.3 percent of County residents, or 60,844 persons, were 65 years of age or older. The proportion of seniors has been steadily increasing due to increased longevity and lower birth rates. The largest proportion



of the over-65 population was located in West County. ABAG's Projections '90 projects that the senior population (age 65 and over) will increase to 87,100 in 1995, or 10.1 percent of the County's population. The proportion of seniors is expected to continue to increase to 11.3 percent through 2005. In 1980, 59 percent of seniors (aged 65 or over) were women.

However, compared to population statistics, a much greater proportion of households were senior in 1980, i.e., 24.2 percent of all California households. Statewide, 85 percent of senior households consist of one or two persons. Estimates from the combined Housing Assistance Plans for Contra Costa County communities indicate the presence of 6,620 elderly, lower-income households that were in need of rental assistance. The predominant problem is overpaying for housing. Although only 9.3 percent of the County population is elderly, the Housing Assistance Plans reveal that 23.3 percent of the rental subsidy needs are for elderly households. Approximately 27 percent of the over-65 population lives in single-person households. Much of this population needs special housing with small, easily-maintained dwelling units. The Housing Authority reports over 425 elderly households are on their rent-subsidy waiting list as of January, 1991.

Many of the elderly are on fixed incomes that may not keep up with the rising costs of housing or increasing medical costs. Deferred maintenance and rising utility costs can particularly be a problem for seniors with limited incomes. Home weatherization, homeowner rehabilitation, and PG&E assistance programs can provide assistance for seniors. A tax postponement program is available to homeowners age 62 and over to defer property tax payments during occupancy in the home.

Seniors are predominantly homeowners. The incidence of homeownership among elderly households (65+ years) exceeds that of the population as a whole - 74.2% as compared to 68.3%. Seniors who own their own homes may be faced with a problem of a different sort. Reluctant to leave because of familiar surroundings, and because alternatives are costly, they may be burdened by a house too large for their needs and expensive to maintain. As a result, they may be forced to lose their independent living situation prematurely. More efficient use of this housing may occur as a result of shared housing efforts in which elderly people in need of housing are matched with those who have extra housing. The conversion of a portion of a unit into a second unit or "granny flat" are often intended to serve the elderly, as well as make more efficient use of the housing, while providing additional income to the owner. An additional source of revenue for elderly homeowners that may have merit are the reverse annuity mortgage, reverse shared appreciation mortgage, private deed annuity, life estate, or sale/leaseback financing mechanisms that allow the elderly to utilize the substantial equity in their home as supplemental income. Because some of these loans have limitations, the availability of counseling to seniors on these mortgages is important.

Seniors also develop needs for different types of housing as they develop health problems or have decreased mobility. They may need units that have fewer steps, require less maintenance, include social and medical services, and/or have increased security. They may have needs for a continuum of care throughout their lifetime ranging from independent living to institutional care, with many semi-independent options in between. These include multi-family units that are less isolated and require less care; congregate care housing (independent units with central dining and social activities); life care facilities that include meals, housekeeping and medical care; or nursing facilities for the physically or mentally disabled. A 1986 American Association of Retired Persons study, which indicates that only 14 percent of seniors prefer to live in exclusively senior communities, suggests that a full range of housing options, including low cost rental units available to residents of all ages, are needed.

Communities may facilitate the production of additional elderly housing by recognizing that the intensity of the land use may be less when compared to family housing and by adjusting parking requirements, density, and fees/exactions accordingly. General obligation bonds could also be utilized to provide for senior housing developments. A December 1988 Forum sponsored by the County's Area Agency on Aging and the Housing Alliance suggested that such an effort may be particularly well suited to providing for affordable rental housing for senior citizens. Preliminary analyses of senior citizen housing needs, financial and fiscal implications, and assessments of the electorate should be conducted prior to initiating a specific measure.

## DISABLED POPULATIONS

Because limited comprehensive data are available on the extent of the disabled populations in Contra Costa County, the best estimates available are either based on Statewide or nationwide disability rates or actual numbers of clients served through local programs that may be serving overlapping populations. According to the 1980 Census, in Contra Costa County 35,112 non-institutionalized persons had work disabilities, and 15,600 persons had disabilities that prevented them from using public transportation. The Independent Living Resource Center estimates that roughly 40,000 Contra Costa County residents are physically disabled. As of March 1988, the U.S. Veterans Administration reports 5,823 disabled veterans in Contra Costa County. According to the State Department of Social Services, in an average month in 1986, 9,288 disabled and 409 blind persons in Contra Costa County received Medi-Cal. In addition, 1,898 aged, 8 blind, 590 disabled, and 3,538 families were determined to be medically needy, and 1,151 medically indigent. As reported by the State Employment Development Department, as of December 1987, 15,666 persons in Contra Costa County received Supplemental Security Income (SSI) in the following categories: 4,764 aged, 430 blind, and 10,472 disabled. Between January 1981 and January 1988, Contra Costa County had recorded 179 AIDS cases, 72 of which had died - ranking ninth among all California counties in the number of cases.

### Physically Handicapped

The physically handicapped experience housing problems due to the shortage of affordable housing and because of the design of most conventional housing. The handicapped tend to have diminished capacity to afford suitable housing due to fixed incomes, and in some cases, diminished employment capacity. Housing needs unique to these populations include handicapped accessibility, unit modifications for deaf or blind, and special social services. Group homes, apartment complexes with services, and single room occupancy hotels can provide housing to accommodate some of these unique needs. It is also important that units for disabled populations be located in areas near transportation and services to enable independent living.

The Fair Housing Amendments Act of 1988 established new requirements for handicapped accessibility in newly constructed multi-family (apartments and condominiums) projects of five or more units available for first occupancy after March 13, 1990. These requirements apply to ground floor units only, unless other floors are accessible by an elevator. This legislation expanded existing handicapped accessibility requirements to apply to condominiums, which is critical since such a high proportion are utilized as rentals, and also increased the number of units required to be accessible in a housing development to 20 percent of the total units. The specific design standards include barrier-free wheelchair accessibility; wheelchair accessible light switches, thermostats, and electrical outlets; and adaptability for grab bars in bathrooms. While this legislation could have great impact, in providing housing for the physically handicapped, it does not require that these units be rented to handicapped persons. Local jurisdictions can increase its effectiveness by encouraging handicapped occupancy in handicapped units.

The State Building Standards Commission also adopted similar new Title 24 handicapped regulations effective January 1990, which revised previous handicapped accessibility requirements.

The federal Fair Housing Amendments Act could also have a widespread impact on land use permit approvals for facilities for the developmentally, mentally and physically handicapped, including AIDS patients, by prohibiting special or conditional land use permit requirements for group homes or other developments for the handicapped. It also expanded federal fair housing protections prohibiting discrimination in sales or rentals to handicapped individuals. The Fair Housing Amendments Act also allows tenants to make handicapped structural modifications to a unit (such as grab bars) at the tenant's expense.

### Mentally/Developmentally Disabled

Disabled populations also include those with mental and developmental disabilities and those recovering from alcohol and drug addictions. A 1984 United Way study estimated that 25 to 30 percent of the population



nationwide experiences mental illness at some time in their lifetime, and 15 percent of the population is mentally ill at any given time. The County Health Department estimates that 2 percent of the County population is "persistently mentally disabled," of which half are treated outside of the public health system.

According to the California Department of Mental Health, the needs of the mentally disabled for long-term housing with services have increased dramatically, as 32,000 mentally disabled have been de-institutionalized statewide; 84 percent of the bedspaces that provided shelter for 5,000 individuals have been cut over the last few decades. There is an anticipated 50 percent cut in current facilities. At the same time, Contra Costa County Board and Care facilities for this population have declined in number. In Central Contra Costa County, for example, board and care facilities have declined from 20 to 6, according to Health Services. Health Services indicates that 333 beds are available for their estimated adult client population of 8,030 based on 1 percent of 1990 population statistics. In contrast, Phoenix Programs estimates that over 17,000 Contra Costa County adults are mentally ill. This population needs transitional and permanent housing with support services.

Information on the number of persons in the County with developmental disabilities is available from client case figures of the Regional Center of the East Bay (RCEB), which serves this population both in Contra Costa and Alameda Counties. As of August 1990, RCEB had 5,564 active clients, 500 more in the process of becoming clients, and 1,400 inactive client cases. In general, RCEB finds that one-third of its caseload consists of Contra Costa County residents. Thus, RCEB estimates that there are about 2,500 known individuals in Contra Costa County with developmental disabilities. In addition, there are 700 County residents living in the State Developmental Center system and those who are not counted by the Regional Center since they have not applied for services. The Contra Costa County Association for Retarded Citizens estimates that one in every ten families has a member with a developmental disability.

The nature of housing needs for this population is changing as social attitudes evolve. In past decades, the need for housing was either for larger congregate living facilities for children and adults, or six-bed group homes of the board-and-care variety. Now there is a dramatic change in housing needs. Children tend to live at home with their families until adulthood, receiving in-home support services and legally mandated educational programs through the public schools. For adults, the "supported life" model is emerging, in which individuals live in apartments, condos or shared single-family homes that they own or rent themselves, receiving support, training or program benefits. Such living situations are integrated environments in the community rather than agency-owned "facilities." The implication for housing is that developmentally disabled persons represent an additional population in close proximity to jobs, shopping and public transportation.

### Substance Abusers

Recovering alcoholics and drug abusers have needs for permanent housing in sober living environments, in addition to short term detoxification and treatment centers. Studies of alcoholism incidence rates nationwide indicate incidence rates that range from 17 to 38 percent per capita.

According to the County Health Services Department, prior to the 1970s, alcoholics could have severe drinking problems and still have a place to live. When an alcoholic's behavior resulted in eviction, he could simply relocate to an inexpensive SRO "transient" hotel. During the 1970s, SRO hotels have been demolished or converted, forcing many of their residents onto the streets or into emergency shelters. At the same time, the Supreme Court's decriminalization of vagrancy has eliminated jails as a source of temporary quarters for skid row populations. In addition, the elimination of alcoholic wards in State hospitals has further reduced housing for this population. In Contra Costa County, the "M" Ward in County Hospital for alcoholics closed in 1975. While detoxification treatment programs have emerged in place of previous forms of treatment, the number of such facilities is inadequate to meet the need.

A 1986 Alameda County study indicates that 3.8 percent of Californians are drug abusers. Those recovering from chemical dependencies have needs similar to recovering alcoholics, with the important exception that little is known at this point about the treatment needs of those using new forms of highly addictive drugs such as "crack" and "ice." Currently, there are sober living houses to house 60 such clients, in addition to 176 beds in treatment centers.

### LARGE FAMILIES

Large families (five or more family members) experience the greatest difficulty in securing affordable housing. Large families comprised 14.5 percent of the County population in 1980, with 25,674 families. Of this number, 2,395 families were determined to be low income with a need for housing assistance in current Housing Assistance Plans. The Housing Authority has indicated that large family rent subsidy recipients find it extremely difficult to secure a unit due to the lack of available rental units larger than 3 bedrooms, stricter tenant screening for large families, and discrimination against families with children in general. The Housing authority reports over 940 families with 3 and 4 bedroom housing requirements are on their rent-subsidy waiting list as of January, 1991. Interestingly, large families are more likely to be homeowners than the population as a whole - 78.3% vs. 68.3%.

## FEMALE HEADED HOUSEHOLDS

Females make up a smaller proportion of the labor force, are generally much lower paid, are in households with children, and often have significant child care expenses, all of which reduce their ability to afford market rate housing. Most of the County Section 8 Certificate housing assistance programs have served households headed by females. In 1989, over 72 percent of Section 8 certificate holders assisted by the County Housing Authority were female-headed households.

Female-headed households comprise 24.3 percent of the total County households. Over one-quarter (27.1 percent) of those households include children. Statewide, female-headed households made up only 14.8 percent of all households in 1980. Thus, Contra Costa County has a comparatively large proportion of female-headed households. According to the California Statewide Housing Plan, the number of female-headed households Statewide increased 55 percent from 1970 to 1980.

Census data available on female-headed households in California indicate that such households are more than three times as likely to have incomes below poverty levels and are almost twice as likely to be ethnic minorities as other households. Statewide, 26.1 percent of all female-headed households in 1980 had incomes below the poverty level; this is compared to 8.7 percent of all family households below the poverty line. Statewide, 35 percent of all female-headed households with children in 1980 were minority (non-white populations), while minority households only made up 19 percent of all households. According to the California Statewide Housing Plan, female-headed households also experience high rates of overcrowding, pay a high percentage of their incomes for housing, and have predominantly very low and low incomes.

Domestic violence and divorce frequently result in sudden displacement of women and their children, and lead to the formation of female-headed households. These adverse conditions, along with the generally lower income status of these families, put female-headed households at a high risk of homelessness. These households need emergency shelter and transitional facilities with services, as well as permanent housing affordable to very low and low income households. The Battered Women's Alternatives assistance group reports that it received approximately 800 requests for shelter in 1989 above their capacity to respond. In the same time period, 603 battered women were unable to obtain transitional shelter.

## FARMWORKERS

According to State Employment Development Department (EDD) estimates for 1987 and 1988, regarding agricultural employment in Contra Costa County, the number of year-round farmworkers has remained stable, while the number of seasonal farmworkers has declined. Farmworkers can be divided into two categories for



the purpose of examining housing needs. Regular farmworkers are defined by EDD as those working 150 or more days per year for the same employer. Seasonal/migrant farmworkers work less than 150 days per year for the same employer and sometimes travel from one area to another for employment. EDD estimates indicate that in 1988 Contra Costa County had 230 (annual average) regular farmworkers and 310 local seasonal/migrant farmworkers, compared to 220 regular and 500 seasonal farmworkers in 1982/1983. The State Department of Housing and Community Development reports eight registered private farmworker camps within Contra Costa County in June of 1989, which are capable of housing 218 workers. Sixteen additional camps were inactive, with one camp permit pending. These facilities are inadequate to serve the number of farmworkers in Contra Costa County.

EDD statistics on the number of farmworkers in August of 1989 during peak agricultural activity indicated that the numbers have continued to decline. Two hundred and fifty regular farmworkers and 460 seasonal farmworkers, for a total of 710 workers, were reported compared to 760 farmworkers reported in August of 1987 and 1988. EDD staff, however, suggests that farmworkers are under-reported by 300 percent. On the other hand, as undocumented workers gain legal status pursuant to the Immigration Reform and Control Act of 1986, they may increasingly leave farm labor to work in other employment sectors.

A 1988 State Department of Housing and Community Development (HCD) study, Migrant Farmworker Housing in California, found seriously substandard housing conditions for farmworkers including serious dilapidation, contamination of water supplies, health hazards related to sewage disposal and lack of plumbing, sanitary facilities, and adequate heating. Farmworkers tend to have very low incomes and experience housing problems resulting from a shortage of affordable units, overcrowding and substandard conditions in their housing, and homelessness. They continue to need affordable rental and homeowner units, as well as homeless facilities, in East County.

Policies in the Open Space Element of this General Plan also address preservation of agriculture and the provision of farmworker housing in agricultural areas (Policies 8-29 through 8-49).

## 6.6 HOMELESSNESS

### HOMELESS POPULATIONS

Homelessness has become increasingly visible in Contra Costa County and is expected to increase. A regional homelessness organization estimates that homelessness is increasing at 25 percent a year. In 1987, the Contra Costa County's Office on Homelessness estimated that there were 5,000 to 6,000 homeless persons in the

County, 3,850 of which were in families, including 2,750 children. In the 1989/90 fiscal year, the County assisted 6,160 homeless

families through the AFDC Homeless Assistance Program. The homeless population is difficult to count because the population is so heterogenous. Many homeless do not want to be identified, and many homeless do not want, or are unable, to use homeless shelters or services. As stated in the State Comprehensive Homeless Assistance Plan:

"Many homeless persons (for example, the chronically mentally ill) are not able to cope with the impersonal nature and regimen associated with shelter facilities. Many fear the confinement of a shelter facility after having spent a portion of their lives in institutions. In addition, elderly and handicapped persons often shun the shelters because they fear the younger, more predatory homeless who frequent the shelters. Thus, on any given night, a significant number of the homeless will not be found in the shelters."

Others of the "hidden homeless" are those who don't receive any support services or those who are doubling-up with friends or family. With so much of the homeless population unreachable, it is hard to draw an accurate profile of the homeless population. Many profiles of the homeless population are actually profiles of only the small portion that utilizes emergency shelters. These points need to be kept in mind when reviewing data about shelter populations.

Besides the homeless shelters, homeless people can be found in police station lobbies, emergency rooms of hospitals, camp sites, parked cars, all-night movie theaters, bus stations, airport terminals, hallways, alleys, along river banks, abandoned buildings, and caves.

Statewide estimates of homelessness include the HCD estimate of 0.3 percent of the population, with the highest concentrations assumed to be in Los Angeles and the Bay Area, and the State Health and Welfare Agency's estimate of 0.3759 percent of the population, not including undocumented workers.

The Office of Homelessness and County human service organizations completed a survey of 1,293 local homeless people in February 1987. Results indicated that 77 percent of the County's homeless in contact with one or more service providers were turned away from housing by the participating organizations and remained unsheltered. From the responding 1,035 County homeless who articulated their shelter needs, 70 percent indicated they had homeless families with children, 18 percent were single men, 8 percent were single women, 3 percent were childless couples, and 1 percent were of unknown family composition. A January 10, 1989 survey of homeless single adults staying at the Richmond Armory, as part of the Winter Relief Program, indicated that very few of the clients were chronically homeless - less than 10 percent had been homeless for a year or more. More accurate information may be available in 1992, when 1990 Census data are released.

A homeless person is defined as anyone without an owned, leased, rented, or shared regular domicile. This would include homeless persons or families occupying emergency shelters, transitional housing facilities, and temporary treatment facilities for drug/alcohol recovery and mental disabilities; living on the streets or in cars; or staying temporarily with friends or family.

Those at risk of homelessness must also be taken into account in assessing housing needs. People at risk would include those below the poverty level or with low or marginal incomes combined with few assets and those who may lose housing and be unable to regain it if their circumstances suddenly change.

Since the mid-1960s, the ranks of people without homes has steadily increased and has expanded from primarily single males with alcohol problems to include families, single women, the elderly and runaway youth. Nearly all ethnic and cultural groups are included among homeless populations. Homelessness occurs in all geographic areas in the County.

The following describes the various subpopulations of the homeless and their housing needs:

#### Families with Children

One- or two-parent families with children comprise the largest percentage of the County's surveyed homeless and are increasing at a faster rate than other homeless populations. A 1988 Public Advocates report, Homelessness Programs in the San Francisco Bay Area, estimates that 45 percent of the California shelter population are children. According to a Homebase report, 45 percent of shelter residents are in families and 35 percent are children. Homebase estimates that, as of June 1989, based on homeless families receiving assistance through AFDC, there were 9,990 homeless individuals in families in the County, not including homeless single adults. Homeless families' needs for affordable family housing; child care; job skills training; drug and alcohol recovery programs; food; and medical care are acute. To serve the needs of families with children, these services should be integrated with appropriate emergency shelter and transitional housing facilities.

#### Single Men and Women

Single men and women comprise the next largest group of County homeless. Members of this population are often unemployed or underemployed, sometimes with drug or alcohol addictions, and health or mental health problems. Single homeless women are particularly vulnerable to crime. Single women have comprised 10 to 15 percent of the single homeless population in the County's National Guard armories. This is consistent with the State Comprehensive Homeless Assistance Plan (CHAP) estimate that women comprise 10 percent of the



California homeless population. The State CHAP, however, also suggests that 90 percent of the single homeless female population is mentally disabled. Two National Guard facilities have provided emergency shelter for singles during the winter months. The County is developing year-round shelters with support services. Pursuit of a number of different shelter proposals has been stymied by neighborhood groups and local jurisdictions opposed to homeless facilities in their areas. The County has established a modular facility for 56 single adults on a County-owned site in North Richmond, as well as a 40-bed facility for families and women.

### Runaway or Abandoned Youths

The State CHAP estimates that 5 to 10 percent of the homeless statewide are runaway youths. Homeless children, especially subject to the deprivations of the streets and vulnerable to physical and sexual abuse, need not only housing, but extensive emotional and social support. One shelter with seven beds exists in the County; the facility is forced to turn away juveniles daily because of lack of space.

### Elderly

A 1989 Homebase report estimates that 5 percent of shelter residents are elderly, 75 percent of whom are women. Homeless elderly and near-elderly, unable to house and feed themselves on subsistence-level fixed incomes, are in need of permanent affordable housing, as well as health and other support services. Elderly are currently aided by some County service programs and by the same motel vouchers and food pantries that assist other homeless populations. Transitional housing, SROs and shared housing programs could provide permanent and semi-permanent assistance to the elderly.

### Victims of Domestic Violence

While only one battered women's shelter exists in the County, a new transitional facility has been rehabilitated. Victims of domestic violence desperately need skills training for economic freedom from their batterers, along with emergency food, medical care and other support services. The battered women's shelter provides excellent service to domestic violence victims; however, it must also turn away persons in crisis due to lack of space. The operator of these facilities has identified the most immediate need for their clients as drug and alcohol recovery programs, in addition to additional shelter and transitional housing capacity.

### Mentally Disabled

Both the State CHAP and the Public Advocates report estimate that 25 to 30 percent of the homeless population is mentally disabled. A 1989 Homebase report estimates that 20 percent of the shelter population in California is mentally ill. The same report indicates that 30 percent of all Americans suffers from serious mental illness

at some point in their lives. Mentally disabled homeless in Contra Costa County have often been compelled to seek assistance in other Counties due to lack of services. Mentally disabled homeless lack the resources to acquire permanent housing and their mental disabilities can be exacerbated by homeless conditions. A facility for 20 single mentally disabled people provides shelter for the County's homeless.

### Physically Disabled

Physically disabled homeless, often with severe medical conditions or mobility problems that preclude them from earning a liveable wage or finding suitable housing, are in extreme crisis when forced to live on the streets. The 1988 National Survey of Shelters for the Homeless reported that 11 percent of sheltered individuals had physical disabilities. The physically disabled need shelter and housing that is handicapped accessible.

### Alcohol and Substance Abusers

The 1989 Homebase report estimates that 23 percent of shelter residents are alcohol or substance abusers. The State Department of Alcohol and Drug Programs estimates that 15 to 25 percent of the homeless are alcoholics statewide. Since there is a great deal of overlap in the substance abuse and mentally disabled populations, HUD's estimate that as high as 50 percent of the homeless are disabled by mental illness or substance abuse.

Individuals addicted to drugs or alcohol, who have made the very difficult decision to recover from their chemical dependency, confront tremendous obstacles to continued sobriety when they return to the community, often to the same environment that supported their addiction. With safe and supportive housing, these individuals would be better able to stay in their own homes and remain productive members of their community. These homeless persons are currently turned away from services or put on long waiting lists, partially due to the fact that there are not enough programs and that supportive housing is not available for graduates of the programs. There is a need for housing facilities that support sobriety.

### Veterans

The 1989 Homebase and the Public Advocates' reports estimate that veterans, who make up only 11 percent of the population, make up 39 percent of the homeless population. Studies of Los Angeles and Bay Area homeless populations reported that approximately one-third were veterans, according to the State CHAP.

Veterans are often physically and mentally disabled while suffering employment problems. As with other homeless in the County, they receive services from a number of different providers and from the Veteran's Hospital. A comprehensive housing and service program is needed, however, for one-stop care.

### Immigrants

The immigrant population is the least likely to request assistance from a public agency and more likely to struggle on its own to secure safe, low-cost housing. Language and cultural differences present barriers to service. Currently, immigrants to the County are assisted by food pantries, the Center for New Americans, motel vouchers, and the County's existing shelter programs. Assistance is found in a variety of separate locations but the lack of transportation, services, and housing presents further impediments to self-sufficiency.

### AIDS Victims

New studies have found that startling numbers of homeless people have tested positive for the HIV virus. People living with AIDS have unique needs for hospice and semi-independent living situations during terminal illnesses.

### Employed

According to a Homebase report, 23 percent of the homeless nationwide have full or part-time jobs. A nationwide study of Traveler's Aid residents found that 44 percent attributed job loss as the immediate cause of their homelessness and also that 37 percent of homeless mothers and 59 percent of homeless fathers had been employed within the previous three months. According to Shelter, Inc.'s log of homeless services requests, 61 percent are employed, 30 percent are on public assistance, and 9 percent are unemployed.

## CAUSES OF HOMELESSNESS

In Contra Costa County, no single factor has caused the dramatic rise in homeless citizens. Rather, a number of interrelated factors combine to contribute to this problem.

### Low Cost and Affordable Housing Unit Shortage

Between 1987 and 1989, the Contra Costa County Homelessness Task Force and Community Homeless Action Resource Team (CHART) submitted reports to the Board of Supervisors outlining the crisis in affordable housing and possible solutions. Both groups recognized that the single biggest factor contributing to the homeless problem is the County's lack of decent and safe housing affordable to lower income families and individuals.

### Increasing Poverty

Due to lack of financial reserves and/or low income levels, many are unable to deal with sudden financial crises such as medical emergencies, theft, eviction, or job lay-offs. According to a Homebase report, the number of



wage earners earning less than poverty level wages has increased to 34.2 percent in 1988. In 1989, full-time minimum wage employment put a family of three \$2,000 below the poverty line.

### Unemployment/Underemployment

The State CHAP points out a correlation between the number of people seeking emergency shelter and high unemployment rate. Unemployment seems to be a critical factor leading to homelessness primarily in those situations where a family/individual situation is already marginal and loss of a job moves the situation to a crisis. Those people affected generally have limited resources, little or no savings, few skills necessary to obtain available help from public and private agencies and minimal marketable job skills.

Studies of shelter residents in Bay Area counties have found that the portrayal of the homeless as "Chronic unemployables" is inaccurate. According to a 1989 Homebase report, approximately a quarter of homeless adults nationwide are employed. For those who are underemployed, or employed at a minimal wage level, crises such as medical emergencies or divorce can result in homelessness if financial resources are not available.

### Deinstitutionalization of the Mentally Ill

In the last two decades, the California State mental hospital system has been dismantled with few alternative resources in place to provide services to the population affected. In California, State hospital bedspaces were decreased from 37,000 to 5,000 between 1960 and 1984. While State deinstitutionalization was intended to be replaced by community-based care, little or no State and federal funds have been allocated to local governments to serve these citizens. Lack of suitable shelter arrangements and treatment resources have left the chronically mentally ill homeless.

### Family Instability

Increased divorce rates, child and spouse abuse, and geographic mobility have contributed to increased social isolation and poverty. More female headed households live in poverty than ever before. Social support systems provided by extended families and friends are often unavailable.

### Personal Crises

In a number of cases, personal crises precipitate homelessness. Examples include domestic violence, marital separation/divorce, running away from home, fire, illness, death in the family, etc. Often, people who are homeless due to personal crises are able to secure temporary and/or permanent housing once their crisis is

resolved. However, personal crises tend to exacerbate drug or alcohol problems, leading to a longer term homeless problem.

### Alcohol and Drug Use

Alcohol and drug use has become increasingly prominent among homeless populations as it has in the general population. Alcohol and drug use contributes to homelessness as limited financial resources are diverted from basic needs and as typical support systems (family, friends, and neighbors) are withdrawn.

### Unavailable Health Care

According to a United Way report, for people living in the lower income brackets, decent medical care is not always accessible and affordable. Living without health insurance can start an economic spiral ending in homelessness. In California, there are 5.2 million non-elderly people without insurance.

## COMPREHENSIVE SOLUTIONS TO HOMELESSNESS

The County Board of Supervisors established the Task Force on Homelessness in 1985, which evolved into CHART, made up of representatives of homeless service providers, community non-profit agencies, key County departments, cities, religious organizations, homeless advocates, and private individuals.

CHART has since evolved into a more formally recognized organization, the Homeless Advisory Committee, which continues to make recommendations to the County Board of Supervisors on homelessness issues. A network of homeless service providers has also developed.

CHART functioned as a goal-setting body charged with the responsibility for:

- o Defining, evaluating and quantifying the County's homeless population;
- o Studying the causes of homelessness;
- o Recommending actions to alleviate the homeless condition;
- o Identifying resources to reduce and potentially eliminate the causes of homelessness;
- o Establishing a work plan to meet these goals; and
- o Working to implement the findings, recommendations, and work plan.

CHART greatly improved communication and cooperation among agencies serving the homeless, along with facilitating the development of long-range strategies to solve the homeless problem. On April 18, 1989, CHART presented a report to the County Board of Supervisors as an update to a July 14, 1987 report on the homeless situation in the County. The report recognized that the single greatest factor contributing to the homeless problem is the lack of decent and safe housing affordable to lower income families and individuals in the County and that efforts to address the need for permanent affordable housing are a critical piece of the homeless assistance package.

The report made the following recommendations to the County and its cities:

- o affordable housing policies and plans within Housing Elements, Housing Assistance Plans, Comprehensive Housing Assistance Plans, and local ordinances to preserve, rehabilitate, and develop affordable housing;
- o lobbying for increase federal and State funding for new housing production and rental assistance programs;
- o actions to address the potential loss of existing low income rental units;
- o development of local Affordable Housing Trust Funds;
- o coordination and expansion of rental assistance programs for homeless or potentially homeless in need of move-in costs, rental arrears payments, or mortgage default prevention assistance;
- o development of housing with support services for homeless families and special need populations;
- o expansion of shared housing programs;
- o preservation and development of SRO hotels; and
- o legislative advocacy for affordable housing policy and funding.

Table 6-13 presents the various shelter facilities that provide emergency shelter and transitional housing for the homeless in Contra Costa County. This table does not indicate the number of bedspaces available to the homeless since many of the facilities listed primarily serve other clientele.

The County's Social Services Department developed a preliminary Strategic Plan on Homelessness in November 1989. It identified the most immediate unmet need as that for emergency shelters. The highest priority intermediate needs were identified as alcohol/drug/mental health treatment services and transitional facilities; job development and employment training; and transitional housing for victims of domestic violence with



alcohol/substance abuse problems. The creation of new affordable housing units was identified as the highest long-range priority for addressing the needs of the homeless.

A number of service providers, non-profit development corporations, and public agencies provide a full range of services for the homeless. These services include health care; job training; drug and alcohol recovery; mental health care; housing assistance; money management; childcare; emergency shelter; and transitional and permanent housing for special needs populations. However, available resources remain unable to meet the demand for services and facilities serving the homeless.

#### SITES FOR HOMELESS FACILITIES

The California Government Code was amended in 1984 and 1986 to prohibit a local jurisdiction from discriminatory practices inhibiting the development of emergency shelters for the homeless. The amendments also direct local governments, along with the State government, to identify the numbers of homeless and causes of homelessness, and devise comprehensive solutions to the problem of homelessness (Section 65008 and 65583). Cities and counties are also required to identify adequate sites for emergency shelters and transitional housing available through appropriate zoning and development standards.

The HCD has given some guidance in implementing this legislation. Options identified by HCD include:

- o programs to increase capacity of existing shelters;
- o identification of suitable structures such as warehouses, schools, or hotels that could be used as, or converted to, shelters;
- o identification of specific sites that have the potential for shelter or transitional housing development during the Housing Element planning period;
- o designation of areas where shelters or transitional housing are permitted; or
- o designation of zone districts in which shelters and transitional housing are permitted uses.

TABLE 6-13  
FACILITIES AVAILABLE TO SERVE HOMELESS POPULATIONS  
IN CONTRA COSTA COUNTY  
(JUNE 1990)

| <u>Name &amp; Address</u>   | <u>Sponsor</u>                   | <u>Phone #</u> | <u>Contact Person</u> | <u>Location</u> | <u># of Beds</u> | <u>Length<br/>of Stay</u> | <u>Population Served</u>             |
|---|----------------------------------|----------------|-----------------------|-----------------|------------------|---------------------------|--------------------------------------|
| EMERGENCY SHELTER   |                                  |                |                       |                 |                  |                           |                                      |
| Battered Women's<br>Shelter (Undis-<br>closed location)                         | Battered Women's<br>Alternatives | 930-8300       | Rollie Mullin         | CCC             | 25               | 4 weeks<br>average        | Battered women and<br>children       |
| Christian Believer's<br>250 4th Street<br>Richmond, CA                          | Christian<br>Believers           | 231-0772       | Gloria Yancy          | West            | 20               |                           | Christian men and<br>women in crisis |
| County Shelter<br>Brookside Drive<br>North Richmond, CA<br>(Temporary facility) | Contra Costa<br>County           |                |                       | West            | 40               |                           | Single men and<br>women              |
| East County Shelter<br>1401 4th Street<br>Antioch, CA 94509                     | Phoenix<br>Programs              | 778-3720       | Rich Rubio            | East            | 20               | 30 days                   | Mentally disabled<br>men and women   |
| East County Community<br>Detox<br>500 School Street<br>Pittsburg, CA 94565      |                                  | 458-1616       | Michael Siems         | East            | 7 men<br>4 women | 3-7 days                  | Alcohol detox and<br>recovery        |

TABLE 13 (Continued)

| <u>Name &amp; Address</u>  | <u>Sponsor</u>                    | <u>Phone #</u> | <u>Contact Person</u> | <u>Location</u> | <u># of Beds</u>  | <u>Length of Stay</u> | <u>Population Served</u>                |
|--|-----------------------------------|----------------|-----------------------|-----------------|-------------------|-----------------------|---|
| Halloman/Faverson<br>New Way Center<br>208 23rd Street<br>Richmond, CA 94801 | Richmond<br>Neighborhood<br>House | 233-1276       | Steve Mitchell        | West            | 3 women<br>14 men | 5 days                | Substance abuse men<br>and women        |
| Nierika House<br>1959/67 Solano Ave.<br>Concord, CA 94520                    | Phoenix<br>Programs               | 676-9768       | M. Grissett           | Central         | 12                | 30 days               | Mentally ill men and<br>women in crisis |
| Richmond Rescue Mission<br>200 MacDonald Avenue<br>Richmond, CA 94802        | 233-1516                          | Malcolm Lee    |                       | West            | 238               | 1-6 weeks             | Christian men, women<br>and families    |
| Shennum Center<br>2090 Commerce Avenue<br>Concord, CA 94520                  |                                   | 676-2580       | Pat Walters           | Central         | 20                | 3-5 days              | Alcohol detox men<br>and women          |

## TRANSITIONAL HOUSING

|   |                     |          |               |         |    |                           |   |
|---|---------------------|----------|---------------|---------|----|---------------------------|---|
| Clean and Sober House<br>San Pablo                            | Phoenix<br>Programs | 232-7633 | Adrian Brown  | West    | 6  | 1-2 years                 | Mentally disabled<br>adults in drug and<br>alcohol recovery |
| Diablo Valley Ranch<br>11540 Marsh Creek<br>Clayton, CA 94517 | BiBett              | 672-5700 | Marsha Stover | Central | 70 | 30-90 days;<br>5 mo. max. | Recovering substance<br>abuse men                           |
| Discovery House I<br>904 Mellus Street<br>Martinez, CA 94553  |                     | 229-4365 | Larry Zucchi  | Central | 19 | 6 mo. to<br>1 year        | Recovering substance<br>abuse men                           |



TABLE 6-13 (Continued)

| <u>Name &amp; Address</u>   | <u>Sponsor</u>                       | <u>Phone #</u> | <u>Contact Person</u> | <u>Location</u> | <u># of Beds</u> | <u>Length of Stay</u> | <u>Population Served</u>                                       |
|---|--------------------------------------|----------------|-----------------------|-----------------|------------------|-----------------------|--|
| Discovery House II<br>4639 Pacheco Blvd.<br>Martinez, CA 94553          |                                      | 229-4212       | Adriane Bento         | Central         | 21               | 1 year                | Recovering substance abuse women                               |
| East County Community Detox<br>500 School Street<br>Pittsburg, CA 94565 |                                      | 458-1616       | Michael Siems         | East            | 14 women         | 30-90 days            | Alcohol recovery   |
| Family Support Center<br>(Undisclosed location)                         | Volunteers of America                | 233-1611       | Leslie Gallen         | West            | 36               | 90 days               | Families and single women                                      |
| Mettha Vihara<br>607 Key Blvd.<br>Richmond, CA 94801                    |                                      | 236-0908       | Rev. Suhita Dharma    | West            | 6                | No limit              | ARC or AIDS men and women                                      |
| New Dawn<br>1515 24th Street<br>Richmond, CA                            | Tri-Counties Women Recovery Services | 236-3134       | Albione Becnel        | West            | 6                | 1 year                | Alcohol recovery women and children                            |
| Nyumba Chuki<br>3215/3221 Nevin Ave.<br>Richmond, CA 94806              | Phoenix Programs                     | 232-7633       | Lucas Daumont         | West            | 12               | 18 mo.                | Mentally disabled and substance abuse recovering men and women |
| Ozanam Center<br>2931 Prospect St.<br>Concord, CA 94520                 | BiBett                               | 676-4840       | Jonah Powell          | Central         | 17               | 1 yr. max.            | Substance abuse recovering women                               |

TABLE 6-13 (Continued)

| <u>Name &amp; Address</u>  | <u>Sponsor</u>                                  | <u>Phone #</u> | <u>Contact Person</u> | <u>Location</u> | <u># of Beds</u>                             | <u>Length of Stay</u> | <u>Population Served</u>                          |
|--|---|----------------|-----------------------|-----------------|--|-----------------------|---|
| Pittsburg Family Ctr.<br>84 W. 6th Street<br>Pittsburg, CA 94565 | Shelter, Inc.                                   | 439-8559       | Kitty Duma            | East            | 37   | 3-6 mo.               | Families  |
| Rectory<br>1901 Church Lane<br>San Pablo, CA 94806               | Tri-Counties<br>Women's<br>Recovery<br>Services | 236-3134       | Albione Becnel        | West            | 10 women<br>5 children                       | 9 months              | Alcohol recovering<br>women and their<br>children |
| Richmond Transitional<br>170 21st Street<br>Richmond, CA 94801   | City of<br>Richmond                             | 231-0772       | Gloria Yancy          | West            | 24   |                       | Families in Job<br>Training<br>Partnership        |
| Rubicon Apartments<br>1709 San Joaquin<br>Richmond, CA 94804     | Rubicon Programs                                | 528-2119       | Helen Branham         | West            | 12   | 9-18<br>months        | Mentally disabled<br>single adults                |
| San Joaquin Apartments<br>Richmond                               |   |                |                       |                 | 17 units<br>(½ transitional,<br>½ permanent) |                       | Mentally disabled<br>single adults                |
| Satellite House<br>Concord, CA                                   | Phoenix<br>Programs                             | 827-8681       | Pat Herman            | Central         | 5  | 1-2 years             | Mentally disabled                                 |
| Shiloh House<br>(Undisclosed location)                           | Richmond Rescue<br>Mission                      | 233-5333       | Malcolm Lee           | Central         | 7  | 9 months              | Christian Families                                |
| Sunrise House<br>135 Mason Circle #D<br>Concord, CA 94520        |   | 825-7049       | Don Travins           | Central         | 6 women<br>24 men                            | 90 days               | Substance abuse<br>recovering men and<br>women    |

TABLE 6-13 (Continued)

| <u>Name &amp; Address</u>  | <u>Sponsor</u>         | <u>Phone #</u> | <u>Contact Person</u> | <u>Location</u> | <u># of Beds</u>                             | <u>Length<br/>of Stay</u> | <u>Population Served</u>           |
|--|------------------------|----------------|-----------------------|-----------------|--|---------------------------|------------------------------------|
| PERMANENT HOUSING  |                        |                |                       |                 |  |                           |                                    |
| Bellevue Hotel<br>331 MacDonald Ave.<br>Richmond, CA 94802       | Christian<br>Believers | 231-0772       | Gloria Yancy          | West            | 26   |                           | Men and women                      |
| Community Living Proj.<br>1720 Clayton Road<br>Concord, CA 94521 | Phoenix<br>Programs    | 827-2683       | Pat Herman            | Central         | 11 1-bed-<br>room apts.                      | No limit                  | Mentally disabled<br>men and women |
| Rubicon Homes<br>970 13th Street<br>Richmond, CA 94804           | Rubicon                | 235-1516       | Helen Branham         | West            | 10   | No limit                  | Mentally disabled                  |
| San Joaquin Apartments<br>Richmond                               |                        |                |                       |                 | 17 units<br>(½ transitional,<br>½ permanent) |                           | Mentally disabled<br>single adults |

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Note: This table does not represent the number of bedspaces available to the homeless, as most of the facilities serve a variety of populations.

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The County has contributed funds to increase the capacity of existing shelters as well as developing new shelter facilities (see Table 6-14). The County has developed site criteria and has been actively involved in site searches for locations for emergency shelter facilities in West, Central, and East County. The County is developing two homeless facilities in County unincorporated areas with County funds to provide year round shelter with services – one to serve 56 single adults in North Richmond and one to provide 40 beds of emergency shelter and transitional housing for families and women. An additional five units of public housing is being set aside for homeless families and individuals.

Emergency shelter facilities are permitted uses in almost all residential zone districts and in other districts such as commercial, retail and industrial zones, as indicated in Table 6-15. Transitional facilities, on the other hand, would be permitted in any zone district that permits residential development, because State law does not permit local jurisdictions to differentiate between different types of occupants in the land use permitting process. Public hearings would be required, however, for proposed homeless facilities if community concerns are expected.

## 6.7 LAND USE INVENTORY

Table 6-16 shows a land use inventory of vacant and undeveloped sites for residential development in Contra Costa County as of November 1992. Figures 6-2 through 6-6 illustrate the land use inventory of vacant and undeveloped residential sites in unincorporated Contra Costa County. As shown, there is ample land available to accommodate the regional housing needs for the planning period and beyond. Approximately 45,101 residential units can be accommodated by the General Plan, of which 35,106 units are designated for single-family residential uses and approximately 9,995 are designated for multifamily uses ranging in density from just under nine to 50 units per acre.

Affordable housing is typically accommodated on land zoned at higher densities as per unit land prices generally decline with increasing density. Of the total multifamily land, over 7,650 of the units are designated for under 12 units per acre, 1,844 units could be developed at between 12 and 22 units per acre, and 260 units are currently allowed at densities over 22 units per acre (excluding any density bonuses). A survey of recent assisted affordable housing projects was conducted to determine the likelihood that there also is sufficient land to achieve the very-low and low-income regional housing needs. The results of the survey suggest that within the unincorporated county, affordable housing is being successfully developed at lower densities than typical of more urban areas. For example, the 26-unit Green Valley Apartments was recently completed by a local nonprofit at 25 units to the acre, this project

TABLE 6-14  
COUNTY-ASSISTED EMERGENCY SHELTER AND TRANSITIONAL HOUSING  
FACILITIES FOR HOMELESS POPULATIONS  
(MAY 1990)

| <u>Project Name/Location</u>                       | <u>Sponsor</u>                            | <u>Type</u>                     | <u>Number<br/>of Spaces</u> | <u>\$ Source</u>        |
|--|---|---------------------------------|-----------------------------|-------------------------|
| Antioch Shelter                                    | Phoenix<br>Programs                       | Mentally<br>Handicapped         | 20                          | ESG, CDBG               |
| Family Support Center,<br>Richmond                 | Volunteers of<br>America                  | Families, women                 | 36                          | ESG, HBTF,<br>CDBG, HUD |
| Battered Women's Shelter<br>Central County         | Battered Women's<br>Alternatives          | Battered women                  | 25                          | ESG ,ESP,<br>CDBG       |
| Young Mothers, Hercules                            | Young Mothers                             | Pregnant women                  | 6                           | ESG, CSBG,              |
| Shell Ave. Shelter<br>Uninc. Martinez              | County                                    | Families, women                 | 40                          | DSS, HBTF, HUD,<br>ESP  |
| Winter Relief Programs,<br>National Guard Armories | VOA, Shelter, Inc.,<br>St. Vincent dePaul | Singles                         | 250                         | HBTF, GF                |
| Las Trampas, Lafayette                             | Las Trampas                               | Developmentally<br>Disabled     | 6                           | CDBG                    |
| Family Center, Pittsburg                           | Shelter, Inc.                             | Families                        | 37                          | CDBG, HUD, HBTF         |
| Transitional Housing                               | Battered Women's<br>Alternatives          | Battered women<br>with children | 14                          | CDBG, HBTF              |
| The Rectory<br>San Pablo                           | Tri Counties<br>Women's Recovery          | Alcoholic<br>women              | 15                          | CDBG                    |
| Modular Shelter,<br>North Richmond                 | County                                    | Singles                         | 56                          | CDBG, ESG, ESP          |
| Public Housing,<br>North Richmond                  | CCC Housing<br>Authority                  | Families,<br>singles            | 24                          | HA, HUD                 |
| Group Home,<br>Central County                      | Housing for Inde-<br>pendent People       | Mentally<br>disabled            | 6                           | CDBG                    |
| Alcohol Residential<br>Recovery Center             | Bibett                                    | Alcohol<br>recovery             | 57                          | CDBG                    |
| Winter Relief Program,<br>Armories                 | County                                    | Singles<br>(winter only)        | Up to<br>250                | HBTF, DSS               |

TABLE 6-14 (Continued)

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Key: CDBG = County Community Development Block Grants  
CSBG = County Community Services Block Grants  
ESG = federal Emergency Shelter Grants  
ESP = state Emergency Shelter Program funds  
DSS = County Department of Social Services  
GF = County General Fund  
HA = County Housing Authority  
HBTF = County Housing Bond Trust Fund  
HUD = U. S. Department of Housing and Urban Development.

Source: Contra Costa County Community Development Department.

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TABLE 6-15  
 ZONE DISTRICTS PERMITTING EMERGENCY SHELTER  
 FACILITIES IN COUNTY UNINCORPORATED AREAS

| Final                       | Without       | With          | With        |
|-----------------------------|---------------|---------------|-------------|
| Development                 | Land Use      | Land Use      |             |
|                             | <u>Permit</u> | <u>Permit</u> | <u>Plan</u> |
| Single Family Residential   |               |               |             |
| R-6                         |               | X             |             |
| R-7                         |               | X             |             |
| R-10                        |               | X             |             |
| R-12                        |               | X             |             |
| R-15                        |               | X             |             |
| R-20                        |               | X             |             |
| R-40                        |               | X             |             |
| Two Family Residential, D-1 |               | X             |             |
| Multiple Family Residential |               | X             |             |
| M-29                        |               | X             |             |
| M-17                        |               | X             |             |
| M-12                        |               | X             |             |
| M-9                         |               | X             |             |
| M-6                         |               | X             |             |
| Water Recreational, F-1     |               | X             |             |
| Light Agricultural, A-1     |               | X             |             |
| General Agricultural, A-2   |               | X             |             |
| Heavy Agricultural, A-3     |               | X             |             |
| Limited Office, O-1         |               | X             |             |
| Administrative Office, A-O  |               | X             |             |
| Interchange Transitional    | X             |               |             |
| Retail Business, R-B        | X             |               |             |
| General Commercial, C       | X             |               |             |
| Light Industrial, L-I       |               | X             |             |
| Heavy Industrial, H-1       |               | X             |             |
| Unrestricted, U             | X             |               |             |
| Planned Unit District, P-1  |               |               | X           |

Note: Emergency shelter is permitted as an eleemosynary use, defined as uses related to, devoted to, or supported by charity. Applications for land use approval of uses permitted in a zone district would require a Development Plan, even if a Land Use Permit is not required.

is exclusively occupied by tenants earning less than 60 percent of the area median income. The 41-unit Brentwood Senior Project is being developed at a density of 20 units per acre, with all the units targeted to households earning under 60 percent of the median household income. The 102-unit Marsh Creek sweat equity project is under construction for single-family residences at an average of 6.6 units per acre. Homeowners of this project are all low-income. Najero Estates is a recently completed 56-unit sweat equity project accommodating low-income households in single-family homes developed at a density of 5.7 units per acre.

In addition, a 1992 survey of 68 apartment projects (representing over 16,000 units of which nearly 75% have been built since 1985) in Contra Costa County indicate that rental units affordable to low income households are being produced by the private market (Ann Roulac & Associates, June 1992; and Contra Costa County Community Development Department). Projects with rents of \$880 per month are affordable to low income households with an income at 80% of the median (refer to Table 6-10). Survey results indicate that nearly that 85% of the units (13,726 units) are affordable to low income. All of the 3832 units surveyed in East County are affordable to low income, and 90% of the 2927 units surveyed in West County are affordable to low income. In the Central County, over 76% of the units surveyed were affordable to low income. Most of the units not affordable to low income were in Pleasant Hill, Walnut Creek, and the San Ramon Valley. In the northern part of the Central County (Martinez, Pacheco), over 99% of the surveyed units were affordable to low income. Project density was known on nearly 9,500 of the 16,000 units surveyed. Forty-five percent (45%) of the units were medium density, and 55% were high density projects in excess of 20 units/acre.

Based on these survey results it has been concluded that it is reasonable to expect multi-family properties in East County, West County and the northern part of Central County to be developed by the private markets at rents affordable to low income households. In addition, development in the Dougherty Valley area of Central County will be required by Agreement to provide affordable units. By extracting multi-family properties from Table 6-16 in the East and West County areas, and in the Martinez/Pacheco area of Central County, it can be conservatively calculated that multi-family properties (low, medium and high density) in these areas could produce 5,945 units. Including other Central County properties increases the number to 8,638 units. Further, including the Dougherty Valley would increase this figure to 14,407 units. Properties designated for medium or high density multi-family development could produce 2,603 units. Including other Central County properties raises this figure to 2,964 units. Including the Dougherty Valley would increase the number of medium and high density multi-family units further yet to 5,272. Properties designated for high density could produce 1,065 units in East, West, and North Central County. Including other Central County properties raises this figure to 1,286 units. Further, including the Dougherty Valley would raise the high density figure to 3,594 units. The potential development figures far exceed the identified need of 903 units affordable to low income households (or the

adjusted 1992 needs figure of 327 units), and the 1,289 units affordable to very low income households (or the adjusted 1992 needs figure of 1,117 units).

Furthermore, in the Dougherty Valley, where 25% of the 11,000 units, (2750) must be affordable to very low, low, and moderate income households of the total units, 2,308 units are in multi-family high density areas. An additional 3,461 units are in multiple family low density areas, and 5,231 units are in a single family category. Using a conservative assumption that the distribution of affordable units is 10% very low, 25% low, and 65% moderate income, these 2,750 affordable units would be distributed such that 275 are very low income units, 688 are low income units, and the remaining 1,788 units are moderate income units.

With respect to the County's identified very low income need (1,289 units), the programmatic responses plus the availability of adequate land developable for multi-family use should provide sufficient opportunity to address very low income needs.

## 6.8 HOUSING CONSTRAINTS AND CONCERNS

Several factors combine to constrain the supply and variety of housing in Contra Costa County and the Bay Area. Some are physical: while the water bodies, ridge-and-valley topography, and Mediterranean-type climate make the Bay Area a desirable place to live, such topography also requires expensive public works projects and limits the amount of easily developable land. Some are institutional: contemporary building practices are written into such diverse codes as government regulations, lending institution requirements, and union work rules. The Tax Reform Act of 1986 has made investment in multifamily housing a less attractive investment resulting in reduced multifamily production. While the impacts of the savings and loan bailout legislation is not yet fully known, it is expected to discourage multifamily building activity as well, by reducing the availability of construction financing. Some are attitudinal: the public in Contra Costa County is only now beginning to accept higher-density development but would generally reject radically different forms of mass-produced housing. Some are political: the electorate's vote to add Article 34 to the State Constitution in 1950 limited local governments' options for providing public housing, while their approval of Proposition 13 in 1978 both reduced the flexibility of the housing market by according tax advantages to long-held properties and resulted in the costs of capital facilities necessary to support new housing being shifted from the community to the buyers and tenants of new housing. Some reflect the state of the economy: a range of costs from interest rates to the costs of materials and labor are set by the national and regional economy.

The various constraints are not all of equal importance, particularly in a short or intermediate range time period. The important constraints, however, are economic and financial program constraints. One, the cost of money



(interest rates), transcends all others. Lower interest rates on building loans and mortgages have resulted in a return to previous periods of high building activity, primarily of homeownership dwellings. After interest rates, there are three other important economic constraints:

- o the shift of infrastructure costs to the housing buyer;
- o tax law changes affecting multifamily residential development; and
- o the low level of public financing for low-income housing.

The following are the more important governmental and non-governmental constraints to the provision of adequate housing.

#### GOVERNMENTAL HOUSING CONSTRAINTS

Some constraints are not subject to government control (e.g., those resulting from the physical environment), and most are subject to only little or moderate control or influence at the local level. Local government cannot, for example, affect market interest rates, but it can somewhat alleviate high market rates by making lower cost financing available through issuing tax-exempt housing revenue bonds, and providing other financial assistance that lower effective borrowing costs.

TABLE 6-16

VACANT AND UNDEVELOPED RESIDENTIAL SITES  
IN UNINCORPORATED CONTRA COSTA COUNTY

This listing shows those lands which are designated for residential development. Among this listing are approved and proposed projects (APs and PPs), not yet built, and vacant lands (FP3s) which have a residential land use designation. The entries in parentheses numbers have been arbitrarily assigned for the purposes of this exercise and do not relate to similar transaction numbers in the Countywide database.

|                              | Traffic     |                     | Land       | Trans.      | Gross        | Density       | Housing      | Trans.     |
|------------------------------|-------------|---------------------|------------|-------------|--------------|---------------|--------------|------------|
| <u>Project Identifier</u>    | <u>Zone</u> | <u>Jurisdiction</u> | <u>Use</u> | <u>Type</u> | <u>Acres</u> | <u>or FAR</u> | <u>Units</u> | <u>No.</u> |
| Ellis High/CCC Building      | 22          | Unicorp W/C         | MFL        | FP3         | 2            | 8.8           | 17           | 1453       |
| Ellis High/CCC Building      | 22          | Unicorp W/C         | SFH        | FP3         | 1            | 5.25          | 5            | 1454       |
| E. Richmond Heights          | 40          | Unicorp W/C         | SFL        | FP3         | 12           | 2.25          | 27           | 1461       |
| E. Richmond Heights          | 41          | Unicorp W/C         | SFL        | FP3         | 4            | 2.25          | 9            | 1462       |
| San Pablo Dam Road           | 42          | Unicorp W/C         | SFH        | FP3         | 10           | 5.25          | 52           | 2223       |
| San Pablo Dam Road           | 43          | Unicorp W/C         | MFH        | FP3         | 8            | 21.6          | 172          | 1464       |
| North Richmond Redevelopment | 52          | Unicorp W/C         | SFH        | FP3         | 26           | 5.25          | 138          | 2218       |
| North Richmond Redevelopment | 53          | Unicorp W/C         | SFH        | FP3         | 84           | 5.25          | 441          | 2216       |
| Hilltop                      | 60          | Unicorp W/C         | MFL        | FP3         | 2            | 8.8           | 17           | 1484       |
| Hilltop                      | 63          | Unicorp W/C         | MFL        | FP3         | 36           | 8.8           | 316          | 1487       |
| South Hilltop                | 66          | Unicorp W/C         | SFH        | FP3         | 3            | 5.25          | 14           | 1490       |
| Wildcat Canyon Park          | 67          | Unicorp W/C         | SFL        | FP3         | 25           | 2.25          | 56           | 1491       |
| San Pablo Dam Road           | 68          | Unicorp W/C         | MFL        | FP3         | 5            | 8.8           | 44           | 2230       |
| 7-1 DGB deBlt                | 68          | Unicorp W/C         | SFH        | FP3         | 1            | 5             | 5            | 1492       |
| 7-2 Clark Road               | 68          | Unicorp W/C         | SFH        | FP3         | 65           | 5.6           | 364          | 1493       |
| Park Glen Estates            | 68          | Unicorp W/C         | SFH        | FP3         | 76           | 5.6           | 425          | 1494       |
| San Pablo Dam Road           | 68          | Unicorp W/C         | SFL        | FP3         | 75           | 2.4           | 180          | 1495       |

Table 6-16 (Continued)

|                           | Traffic     |                     | Land       | Trans.      | Gross        | Density       | Housing      | Trans.     |
|---------------------------|-------------|---------------------|------------|-------------|--------------|---------------|--------------|------------|
| <u>Project Identifier</u> | <u>Zone</u> | <u>Jurisdiction</u> | <u>Use</u> | <u>Type</u> | <u>Acres</u> | <u>or FAR</u> | <u>Units</u> | <u>No.</u> |
| San Pablo Dam Road        | 69          | Unicorp W/C         | SFH        | FP3         | 27           | 5.25          | 141          | 1496       |
| Appian Way                | 70          | Unicorp W/C         | SFH        | FP3         | 28           | 5.25          | 147          | 1497       |
| 7-1 Szopleray             | 72          | Unicorp W/C         | MFL        | FP3         | 6            | 12            | 72           | 1498       |
| Appian Way                | 72          | Unicorp W/C         | SFH        | FP3         | 22           | 5.6           | 123          | 1499       |
| Pinole Vista/Appian Way   | 73          | Unicorp W/C         | SFH        | FP3         | 2            | 5.6           | 11           | 1501       |
| San Pablo Dam Road        | 74          | Unicorp W/C         | MFL        | FP3         | 5            | 8.8           | 44           | 2226       |
| Salvation Army (3027-88)  | 74          | CNTY/ES             | MS         | BP          | 1.15         | 43.5          | 50           | (5021)     |
| Santa Rita Road           | 74          | Unicorp W/C         | SFH        | FP3         | 12           | 5.25          | 63           | 1502       |
| INESS/7240                | 74          | CNTY/ES             | SM         | AP          | 7.25         | 2.3           | 21           | (5022)     |
| WANG (3033-88)            | 75          | CNTY/ES             | MM         | AP          | 2.2          | 10            | 22           | (5023)     |
| El Sobrante/Richmond      | 75          | Unicorp W/C         | SFH        | FP3         | 28           | 5.6           | 156          | 1503       |
| El Sobrante/Richmond      | 75          | Unicorp W/C         | SFL        | FP3         | 63           | 2.4           | 151          | 1504       |
| 7-1 Mitey Mite            | 75          | Unicorp W/C         | SFM        | FP3         | 8            | 4.5           | 36           | 1505       |
| HPKINS/7248               | 75          | CNTY/ES             | SM         | AP          | 1.188        | 5.1           | 6            | (5024)     |
| Appian/San Pablo Dam Road | 76          | Unicorp W/C         | MFL        | FP3         | 1            | 8.8           | 8            | 2232       |
| El Sobrante               | 76          | Unicorp W/C         | SFH        | FP3         | 2            | 5.25          | 10           | 1506       |
| EMCM/3049-88              | 76          | CNTY/ES             | SM         | AP          | 7            | 3             | 21           | (5025)     |
| TSAI/7082                 | 79          | CNTY/ES             | MM         | AP          | 1.87         | 12.8          | 24           | (5026)     |
| SAWHEY 3044-88            | 101         | CNTY/MA             | MV         | AP          | 1            | 18            | 18           | (5027)     |
| 3015-89                   | 102         | CNTY/RO             | ML         | AP          | .69          | 20.29         | 14           | (5028)     |
| Morgan (3028-88)          | 104         | CNTY/CR             | SM         | AP          | 10.96        | 2.1           | 23           | (5029)     |
| Crockett                  | 105         | Unicorp W/C         | SFM        | FP3         | 17           | 3.75          | 63           | 1541       |
| Crockett                  | 106         | Unicorp W/C         | SFM        | FP3         | 5            | 0.75          | 3            | 1542       |
| BRASESCO/7006             | 106         | CNTY/CR             | SL         | AP          | 2.88         | 2.1           | 6            | (5030)     |



Table 6-16 (Continued)

|                                 | Traffic     |                     | Land       | Trans.      | Gross        | Density       | Housing      | Trans.     |
|---------------------------------|-------------|---------------------|------------|-------------|--------------|---------------|--------------|------------|
| <u>Project Identifier</u>       | <u>Zone</u> | <u>Jurisdiction</u> | <u>Use</u> | <u>Type</u> | <u>Acres</u> | <u>or FAR</u> | <u>Units</u> | <u>No.</u> |
| Port Costa                      | 107         | Unicorp W/C         | SFH        | FP3         | 2            | 5.25          | 10           | 1543       |
| AGNELLOP 3035-88                | 108         | CNTY/RO             | MH         | AP          | .37          | 27            | 10           | (5031)     |
| Franklin Canyon                 | 109         | Unicorp W/C         | SFVL       | FP3         | 56           | 0.75          | 42           | 1547       |
| Hassletine/Best (7091)          | 110         | CNTY/MA             | SVL        | AP          | 235          | 0.27          | 47           | (5032)     |
| Alhambra Valley                 | 111         | Unicorp W/C         | SFVL       | FP3         | 11           | 0.75          | 8            | 1548       |
| 7-4 Schell et al. (6465)        | 112         | Unicorp W/C         | SFL        | FP3         | 5            | 2             | 10           | 1549       |
| 7-3 Carriage Hills West         | 112         | Unicorp W/C         | SFL        | FP3         | 135          | 2.333         | 314          | 1551       |
| BELLECI/6999                    | 115         | CNTY/MA             | SF         | AP          | 79.062       | 0.1           | 7            | (5033)     |
| HRC/7238                        | 115         | CNTY/MA             | SL         | BP          | 10.090       | 1             | 10           | (5034)     |
| 7-2 Syc. Const. (6796)          | 116         | Unicorp W/C         | SFL        | FP3         | 10           | 2.7           | 27           | 1553       |
| Reliez Valley Road              | 116         | Unicorp W/C         | SFVL       | FP3         | 70           | 0.75          | 52           | 1554       |
| MUCHLINSKI/7144                 | 116         | CNTY/PH             | SL         | AP          | 20           | 1.2           | 24           | (5035)     |
| General Plan Buildout           | 117         | Unicorp W/C         | SFVL       | FP3         | 30           | 0.75          | 22           | 1555       |
| 7-1 Saddlehorn Ranch            | 117         | Unicorp W/C         | SFVL       | FP3         | 53           | 0.509         | 36           | 1556       |
| 7-1 Kimmel                      | 119         | Unicorp W/C         | SFL        | FP3         | 26           | 1.115         | 28           | 1559       |
| Reliez Valley                   | 120         | Unicorp W/C         | SFVL       | FP3         | 100          | 0.75          | 75           | 1560       |
| Reliez Valley                   | 121         | Unicorp W/C         | SFVL       | FP3         | 44           | 0.75          | 33           | 1561       |
| Franklin Hills                  | 122         | Unicorp W/C         | SFVL       | FP3         | 4            | 0.75          | 3            | 1562       |
| RAWSKI/3014-89/Homeless Shelter | 129         | CNTY/MA             | CC         | AP          | .25          | 80            | 20           | (5036)     |
| Pacheco Boulevard/Shell Avenue  | 129         | Unicorp W/C         | SFH        | FP3         | 3            | 5.25          | 15           | 1569       |
| Shell/Palm Avenue               | 130         | Unicorp W/C         | SFM        | FP3         | 28           | 3.75          | 105          | 1571       |
| CZIYLENZI/7391                  | 134         | CNTY/MA             | ML         | AP          | 1.630        | 5.5           | 9            | (5037)     |
| Acme/IT                         | 134         | Unicorp W/C         | SFM        | FP3         | 7            | 3.75          | 26           | 1573       |
| CZLYLENYI/7300                  | 134         | CNTY/MA             | SH         | AP          | 2.38         | 5.5           | 13           | (5038)     |

Table 6-16 (Continued)

|                            | Traffic     |                     | Land       | Trans.      | Gross        | Density       | Housing      | Trans.     |
|----------------------------|-------------|---------------------|------------|-------------|--------------|---------------|--------------|------------|
| <u>Project Identifier</u>  | <u>Zone</u> | <u>Jurisdiction</u> | <u>Use</u> | <u>Type</u> | <u>Acres</u> | <u>or FAR</u> | <u>Units</u> | <u>No.</u> |
| Shell Oil                  | 135         | Unicorp W/C         | SFM        | FP3         | 5            | 3.8           | 19           | 1574       |
| Vine Hill                  | 136         | Unicorp W/C         | MFM        | FP3         | 4            | 15.2          | 60           | 1577       |
| Vine Hill                  | 136         | Unicorp W/C         | SFH        | FP3         | 1            | 5.25          | 5            | 1578       |
| Vine Hill                  | 136         | Unicorp W/C         | SFM        | FP3         | 8            | 3.75          | 30           | 1579       |
| John Muir Parkway          | 137         | Unicorp W/C         | MFM        | FP3         | 6            | 15.2          | 91           | 1580       |
| John Muir Parkway          | 137         | Unicorp W/C         | SFH        | FP3         | 22           | 5.25          | 115          | 1581       |
| GSL/7304                   | 137         | CNTY/MA             | SH         | BP          | 1.113        | 8.1           | 9            | (5039)     |
| 7-1 Fig Tree Townhouses    | 138         | Unicorp W/C         | MFH        | FP3         | 6            | 17.667        | 106          | 1582       |
| CL Assoc. (7153)           | 138         | CNTY/MA             | ML         | BP          | 2.43         | 8.79          | 16           | (5040)     |
| John Muir Parkway          | 138         | Unicorp W/C         | SFM        | FP3         | 10           | 3.75          | 37           | 1583       |
| 7-3 Jim Snow               | 138         | Unicorp W/C         | SFM        | FP3         | 3            | 4             | 12           | 1584       |
| 7-4 Souza (6959)           | 138         | Unicorp W/C         | SFM        | FP3         | 4            | 3             | 12           | 1585       |
| CL Assoc./Lindsay (7113)   | 138         | CNTY/MA             | SH         | BP          | 7.5          | 5.51          | 31           | (5041)     |
| CASELTON/7230              | 138         | CNTY/MA             | SM         | BP          | 5.99         | 2.8           | 17           | (5042)     |
| JENSEN/7322                | 138         | CNTY/MA             | SM         | BP          | 2.03         | 3.45          | 7            | (5043)     |
| Pacheco Boulevard s/o ATSF | 139         | Unicorp W/C         | MFL        | FP3         | 10           | 8.8           | 88           | 2235       |
| 7-1 Botholz Townhouses     | 139         | Unicorp W/C         | MFM        | FP3         | 1            | 11            | 11           | 1586       |
| STREMEL/3020-89/7324       | 139         | CNTY/MA             | SH         | AP          | 6.16         | 4.4           | 27           | (5044)     |
| Central San/Blum Road      | 140         | Unicorp W/C         | SFM        | FP3         | 7            | 3.75          | 26           | 1587       |
| CC Country Club            | 144         | Unicorp W/C         | SFM        | FP3         | 1            | 3.75          | 3            | 1594       |
| 7-1 Briar Rose             | 147         | Unicorp W/C         | SFL        | FP3         | 30           | 1.633         | 48           | 1599       |
| Alhambra/Reliez Valley     | 147         | Unicorp W/C         | SFL        | FP3         | 27           | 2.25          | 60           | 1600       |
| 7-2 D&M Development (6958) | 149         | Unicorp W/C         | MFL        | FP3         | 2            | 11            | 22           | 1602       |
| 7-1 RSB Co. (3006-86)      | 149         | Unicorp W/C         | MFM        | FP3         | 3            | 14.667        | 44           | 1603       |

Table 6-16 (Continued)

|                             | Traffic     |                     | Land       | Trans.      | Gross        | Density       | Housing      | Trans.     |
|-----------------------------|-------------|---------------------|------------|-------------|--------------|---------------|--------------|------------|
| <u>Project Identifier</u>   | <u>Zone</u> | <u>Jurisdiction</u> | <u>Use</u> | <u>Type</u> | <u>Acres</u> | <u>or FAR</u> | <u>Units</u> | <u>No.</u> |
| LOVING/7333                 | 150         | CNTY/PA             | MV         | BP          | 3.7          | 57            | 211          | (5046)     |
| Center Avenue/Chilpancing   | 150         | Unicorp W/C         | SFH        | FP3         | 5            | 5.25          | 26           | 1604       |
| Morello/Taylor Boulevard    | 154         | Unicorp W/C         | SFL        | FP3         | 1            | 2.25          | 2            | 1605       |
| 7-1 Desco/Wayside Plaza     | 161         | Unicorp W/C         | MFM        | FP3         | 10           | 20            | 200          | 1607       |
| Park Regency GPA            | 161         | Unicorp W/C         | MFVH       | FP3         | 11           | 82            | 902          | 2237       |
| DESCO/3018-89               | 161         | CNTY/PH             | MS         | AP          | 4.4          | 48            | 211          | (5047)     |
| 7-1 Davidon/Dalley          | 166         | Unicorp W/C         | SFM        | FP3         | 18           | 3.833         | 68           | 1608       |
| 7-1 Pacific National        | 170         | Bay Point           | MFH        | FP3         | 14           | 21.6          | 302          | 1617       |
|                             | 170         | Bay Point           | SFH        | PP          | 22           | 5.5           | 121          | (5049)     |
| MORRISON/7178               | 171         | CNTY/CD             | SH         | AP          | 3            | 5             | 15           | (5050)     |
| BELLECI/7027                | 171         | CNTY/CD             | SH         | BP          | 5.26         | 4.2           | 22           | (5051)     |
| ISACKSON/7154               | 318         | CNTY/WC             | SL         | AP          | 11.7         | 2.2           | 26           | (5052)     |
| HOLT/7099                   | 323         | CNTY/AL             | SL         | BP          | 4.28         | 1.4           | 6            | (5053)     |
| Walnut Boulevard            | 241         | Unicorp W/C         | SFH        | FP3         | 2            | 5.25          | 10           | 1666       |
| HASSELTINE/7097             | 242         | CNTY/WC             | SL         | AP          | 4.1          | 1.45          | 8            | (5054)     |
| Perma-Built/Papettii (7146) | 244         | CNTY/WC             | CC         | AP          | 6.26         | 31.31         | 196          | (5055)     |
| Indian Valley               | 244         | Unicorp W/C         | SFL        | FP3         | 37           | 2.25          | 83           | 1667       |
| SCHURICHT/7168              | 244         | CNTY/WC             | SL         | AP          | 6.34         | 0.45          | 6            | (5056)     |
| Indian Valley               | 245         | Unicorp W/C         | SFVL       | FP3         | 5            | 0.75          | 3            | 1668       |
| Castle Rock                 | 248         | Unicorp W/C         | SFVL       | FP3         | 35           | 0.75          | 26           | 1671       |
| Lime Ridge                  | 251         | Unicorp W/C         | SFL        | FP3         | 4            | 2.25          | 9            | 1674       |
| Rancho Paraiso              | 251         | Unicorp W/C         | SFL        | FP3         | 207          | 1.372         | 284          | 1675       |
| Lime Ridge                  | 251         | Unicorp W/C         | SFM        | FP3         | 3            | 3.75          | 11           | 1676       |
| SHURIGHT/7143               | 251         | CNTY/WC             | SL         | AP          | 10           | 0.9           | 9            | (5057)     |



Table 6-16 (Continued)

|                           | Traffic     |                     | Land       | Trans.      | Gross        | Density       | Housing      | Trans.     |
|---------------------------|-------------|---------------------|------------|-------------|--------------|---------------|--------------|------------|
| <u>Project Identifier</u> | <u>Zone</u> | <u>Jurisdiction</u> | <u>Use</u> | <u>Type</u> | <u>Acres</u> | <u>or FAR</u> | <u>Units</u> | <u>No.</u> |
| Irvine (7110)             | 251         | CNTY/WC             | SL         | AP          | 207          | 1.31          | 205          | (5058)     |
| Newhall Ranch             | 252         | Unicorp W/C         | SFH        | FP3         | 192          | 5.25          | 1,008        | 1677       |
| Pine Hollow               | 256         | Unicorp W/C         | SFH        | FP3         | 21           | 5.25          | 110          | 1678       |
| S. E. Clayton             | 265         | Unicorp W/C         | SFL        | FP3         | 16           | 2.25          | 36           | 1693       |
| post property/Alamo       | 269         | Unicorp W/C         | SFL        | FP3         | 68           | 2.25          | 153          | 1694       |
| South WC                  | 270         | Unicorp W/C         | SFL        | FP3         | 12           | 2.25          | 27           | 1695       |
| BLACKBURN/7074            | 270         | CNTY/WC             | SL         | AP          | 7.3          | 1.8           | 13           | (5060)     |
| South WC                  | 271         | Unicorp W/C         | SFL        | FP3         | 8            | 2.25          | 18           | 1696       |
| STEDMAN/6934              | 271         | CNTY/WC             | SL         | AP          | 13.06        | 1.7           | 23           | (5061)     |
| BLACKBURN/7075            | 271         | CNTY/WC             | SL         | BP          | 8.05         | 1.7           | 14           | (5062)     |
| NW Alamo                  | 273         | Unicorp W/C         | SFL        | FP3         | 12           | 2.25          | 27           | 1698       |
| WESTBROOK/7247            | 273         | CNTY/WC             | SL         | BP          | 3.19         | 1.6           | 5            | (5063)     |
| Saranap/Castle Hill       | 274         | Unicorp W/C         | SFH        | FP3         | 6            | 5.25          | 31           | 1699       |
| Saranap/Castle Hill       | 274         | Unicorp W/C         | SFL        | FP3         | 12           | 2.25          | 27           | 1700       |
| Saranap/Castle Hill       | 274         | Unicorp W/C         | SFM        | FP3         | 8            | 3.75          | 30           | 1701       |
| SUN/7307                  | 274         | CNTY/WC             | SL         | AP          | 7.41         | 2.2           | 16           | (5064)     |
| ARTEK/7233                | 274         | CNTY/WC             | SL         | AP          | 2.56         | 2.3           | 6            | (5065)     |
| Saranap                   | 277         | Unicorp W/C         | SFL        | FP3         | 6            | 2.25          | 13           | 1706       |
| 7267                      | 277         | CNTY/WC             | SV         | AP          | 11.25        | .62           | 7            | (5067)     |
| Saranap                   | 278         | Unicorp W/C         | MFH        | FP3         | 1            | 21.6          | 21           | 1707       |
| Saranap                   | 278         | Unicorp W/C         | SFH        | FP3         | 7            | 5.25          | 36           | 1708       |
| 7-1 Rancho Laguna         | 292         | Unicorp W/C         | SFVL       | FP3         | 213          | 0.3           | 63           | 1729       |
| Canyon                    | 301         | Unicorp W/C         | MFL        | FP3         | 7            | 8.8           | 61           | 1743       |
| Canyon                    | 301         | Unicorp W/C         | SFL        | FP3         | 126          | 2.25          | 283          | 1744       |

Table 6-16 (Continued)

|                           | Traffic     |                     | Land       | Trans.      | Gross        | Density       | Housing      | Trans.     |
|---------------------------|-------------|---------------------|------------|-------------|--------------|---------------|--------------|------------|
| <u>Project Identifier</u> | <u>Zone</u> | <u>Jurisdiction</u> | <u>Use</u> | <u>Type</u> | <u>Acres</u> | <u>or FAR</u> | <u>Units</u> | <u>No.</u> |
| Gateway Valley            | 305         | Unicorp W/C         | MFL        | FP3         | 28           | 10.714        | 299          | 1755       |
| Gateway Valley            | 305         | Unicorp W/C         | SFM        | FP3         | 60           | 5             | 300          | 1759       |
| Tilden/El Toyonal         | 312         | Unicorp W/C         | SFL        | FP3         | 31           | 2.25          | 69           | 1764       |
| El Toyonal                | 313         | Unicorp W/C         | SFVL       | FP3         | 60           | 0.75          | 45           | 1765       |
| North Orinda              | 315         | Unicorp W/C         | SFVL       | FP3         | 212          | 0.75          | 159          | 1768       |
| Lafayette                 | 316         | Unicorp W/C         | SFVL       | FP3         | 180          | 0.75          | 135          | 1769       |
| Alamo                     | 317         | Unicorp W/C         | SFVL       | FP3         | 35           | 0.75          | 26           | 1770       |
| MAJORS/7171               | 317         | CNTY/WC             | SL         | AP          | 7            | 1             | 7            | (5068)     |
| Alamo                     | 318         | Unicorp W/C         | SFVL       | FP3         | 15           | 0.75          | 11           | 1771       |
| DEBOLT/7306               | 318         | CNTY/WC             | SL         | BP          | 2            | 2.5           | 5            | (5069)     |
| Alamo                     | 319         | Unicorp W/C         | SFVL       | FP3         | 17           | 0.75          | 12           | 1772       |
| Alamo                     | 320         | Unicorp W/C         | SFVL       | FP3         | 100          | 0.75          | 75           | 1774       |
| Alamo                     | 322         | Unicorp W/C         | SFVL       | FP3         | 29           | 0.75          | 21           | 1775       |
| Alamo                     | 323         | Unicorp W/C         | SFL        | FP3         | 11           | 2.25          | 24           | 1776       |
| Alamo                     | 323         | Unicorp W/C         | SFVL       | FP3         | 135          | 0.75          | 101          | 1777       |
| HSC/7063                  | 323         | CNTY/AL             | SL         | BP          | 10.21        | 2.06          | 21           | (5070)     |
| J. Moore's project        | 324         | Unicorp W/C         | SFL        | FP3         | 47           | 0.95          | 44           | 2207       |
| Castle Rock               | 325         | Unicorp W/C         | SFL        | FP3         | 47           | 2.25          | 105          | 1779       |
| Alamo                     | 326         | Unicorp W/C         | SFL        | FP3         | 16           | 2.25          | 36           | 1781       |
| Alamo                     | 326         | Unicorp W/C         | SFVL       | FP3         | 100          | 0.75          | 75           | 1782       |
| Diablo                    | 331         | Unicorp W/C         | SFL        | FP3         | 72           | 2.25          | 162          | 1787       |
| MURPHY/7109               | 331         | CNTY/AL             | SL         | AP          | 8.73         | 0.69          | 6            | (5072)     |
| Alamo                     | 332         | Unicorp W/C         | SFL        | FP3         | 34           | 2.25          | 76           | 1788       |
| VERMILLION/7216           | 371         | CNTY/SR             | MM         | BP          | 14.39        | 9.7           | 140          | (5073)     |

Table 6-16 (Continued)

|                                     | Traffic     |                     | Land       | Trans.      | Gross        | Density       | Housing      | Trans.     |
|-------------------------------------|-------------|---------------------|------------|-------------|--------------|---------------|--------------|------------|
| <u>Project Identifier</u>           | <u>Zone</u> | <u>Jurisdiction</u> | <u>Use</u> | <u>Type</u> | <u>Acres</u> | <u>or FAR</u> | <u>Units</u> | <u>No.</u> |
| Bryan/Grupe (7108)                  | 372         | CNTY/SR             | ML         | BP          | 13.93        | 10.5          | 117          | (5074)     |
| Westside SR                         | 383         | Unicorp W/C         | SFL        | FP3         | 176          | 3             | 528          | 1851       |
| Westside SR                         | 387         | Unicorp W/C         | MFL        | FP3         | 209          | 9.8           | 2,048        | 1853       |
| Westside SR                         | 387         | Unicorp W/C         | SFVL       | FP3         | 203          | 0.75          | 152          | 1854       |
| West Branch                         | 398         | Unicorp W/C         | MFVL       | FP3         | 16           | 5.6           | 89           | 1875       |
| West Branch                         | 398         | Unicorp W/C         | SFL        | FP3         | 24           | 2.25          | 54           | 1876       |
| Old Blackhawk Road, Spec. Pln.      | 403         | Unicorp W/C         | MFL        | FP3         | 19           | 8.8           | 167          | 2208       |
| Old Blackhawk Road, Spec. Pln.      | 403         | Unicorp W/C         | SFH        | FP3         | 33           | 5.25          | 173          | 2209       |
| Athenian School                     | 403         | Unicorp W/C         | SFL        | FP3         | 47           | 0.957         | 44           | 1886       |
| Old Blackhawk Road, Spec. Pln.      | 403         | Unicorp W/C         | SFL        | FP3         | 21           | 2.25          | 47           | 2210       |
| Black Hills GPA                     | 403         | Unicorp W/C         | SFL        | FP3         | 31           | 1.29          | 39           | 2211       |
| Blackhawk/Country Club              | 403         | CNTY/DA             | SL         | BP          | 25.12        | 1.19          | 24           | (5075)     |
| 7-1 Ujdar                           | 404         | Unicorp W/C         | SFH        | FP3         | 20           | 5.65          | 113          | 1887       |
| 7-2 Bettencourt                     | 404         | Unicorp W/C         | SFL        | FP3         | 325          | 1.446         | 469          | 1888       |
| Braddock/Logan (7188)               | 404         | CNTY/DA             | SL         | BP          | 325          | 1.92          | 469          | (5076)     |
| BRADDOCK/3011-89                    | 404         | CNTY/DA             | SM         | BP          | 19.22        | 3.2           | 62           | (5077)     |
| DEBOLT/7023                         | 405         | CNTY/CL             | SL         | BP          | 573.845      | 0.02          | 9            | (5078)     |
|                                     | 414         | Bay Point           | MFL        | AP          | 6            | 8.8           | 53           | (5079)     |
| Shore Acres/Bay Point Redevelopment | 414         | Bay Point           | SFH        | FP3         | 2            | 5.25          | 11           | 1897       |
| n/o Willow Pass                     | 415         | Bay Point           | MFM        | FP3         | 12           | 15.2          | 182          | 1899       |
|                                     | 415         | Bay Point           | SFH        | PP          | 59           | 5.25          | 310          | (5080)     |
| AB (3005-90)                        | 416         | Bay Point           | MFH        | PP          | 0.47         | 29.79         | 14           | (5000)     |
| 7-1 Tener & Associates              | 416         | Bay Point           | MFM        | FP3         | 0            | 20            | 0            | 1901       |
| s/o Willow Pass                     | 416         | Bay Point           | MFM        | FP3         | 1            | 15.2          | 15           | 1902       |



Table 6-16 (Continued)

|                           | Traffic     |                     | Land       | Trans.      | Gross        | Density       | Housing      | Trans.     |
|---------------------------|-------------|---------------------|------------|-------------|--------------|---------------|--------------|------------|
| <u>Project Identifier</u> | <u>Zone</u> | <u>Jurisdiction</u> | <u>Use</u> | <u>Type</u> | <u>Acres</u> | <u>or FAR</u> | <u>Units</u> | <u>No.</u> |
| Oakley Road               | 462         | Oakley              | SFL        | FP3         | 43           | 2.25          | 97           | 1949       |
| Big Break                 | 477         | Oakley              | SFH        | FP3         | 68           | 5.25          | 357          | 1970       |
| Route 4/Oakley Road       | 478         | Oakley              | MFM        | FP3         | 10           | 15.2          | 152          | 1973       |
| Belleci (7330)            | 478         | Oakley              | SFH        | AP          | 23           | 5.67          | 102          | (5081)     |
| Oakley                    | 478         | Oakley              | SFH        | AP          | 7.4          | 5.5           | 41           | (5082)     |
| Slardigi (7367)           | 479         | Oakley              | SFH        | AP          | 7.5          | 6.38          | 37           | (5083)     |
| Claremont Homes (7366)    | 479         | Oakley              | SFH        | AP          | 7.4          | 6.2           | 31           | (5084)     |
| Belleci (7203)            | 479         | Oakley              | SFH        | AP          | 20           | 5.95          | 91           | (5085)     |
|                           | 479         | Oakley              | SFH        | AP          | 27.5         | 5.5           | 151          | (5086)     |
| ATSF/Route 4              | 479         | Oakley              | SFH        | FP3         | 10           | 5.25          | 53           | 1974       |
| s/o Oakley Road           | 480         | Oakley              | MFL        | FP3         | 29           | 8.8           | 255          | 1975       |
| s/o Oakley Road           | 480         | Oakley              | MFM        | FP3         | 21           | 15.2          | 319          | 1976       |
| s/o Oakley Road           | 480         | Oakley              | SFH        | FP3         | 49           | 5.25          | 257          | 1977       |
| California Homes (7368)   | 480         | Oakley              | SFH        | PP          | 9.7          | 5             | 39           | (5001)     |
| JE (7083)                 | 480         | Oakley              | SFL        | AP          | 4.2          | 1.36          | 4            | (5087)     |
| Belleci/Adams (7232)      | 480         | Oakley              | SFL        | AP          | 5            | 2.67          | 10           | (5088)     |
| Oakley                    | 480         | Oakley              | SFL        | AP          | 53           | 2.25          | 119          | (5089)     |
| 7-1 South Forty (6711)    | 480         | Oakley              | SFL        | FP3         | 27           | 1.852         | 50           | 1978       |
| s/o Oakley Road           | 480         | Oakley              | SFL        | FP3         | 26           | 2.25          | 59           | 1979       |
| Northstar (7426)          | 480         | Oakley              | SFL        | PP          | 12.41        | 2.9           | 27           | (5002)     |
| I&F Partnership (7467)    | 480         | Oakley              | SFL        | PP          | 4.9          | 2.86          | 11           | (5003)     |
| Belleci (7495)            | 480         | Oakley              | SFL        | PP          | 5.16         | 2.79          | 12           | (5004)     |
| Belleci/Bliss (7358)      | 480         | Oakley              | SFL        | PP          | 19.9         | 2.62          | 43           | (5005)     |
| Belleci (7438)            | 480         | Oakley              | SFL        | PP          | 7.1          | 1.76          | 11           | (5006)     |

Table 6-16 (Continued)

|                              | Traffic     |                     | Land       | Trans.      | Gross        | Density       | Housing      | Trans.     |
|------------------------------|-------------|---------------------|------------|-------------|--------------|---------------|--------------|------------|
| <u>Project Identifier</u>    | <u>Zone</u> | <u>Jurisdiction</u> | <u>Use</u> | <u>Type</u> | <u>Acres</u> | <u>or FAR</u> | <u>Units</u> | <u>No.</u> |
| AB (7202)                    | 480         | Oakley              | SFL        | PP          | 6.4          | 5.42          | 26           | (5007)     |
| AB (7359)                    | 480         | Oakley              | SFL        | PP          | 20           | 2.28          | 38           | (5090)     |
| Belleci (7165)               | 480         | Oakley              | SFM        | AP          | 10           | 4.29          | 33           | (5091)     |
| AB (7090)                    | 480         | Oakley              | SFM        | AP          | 2.66         | 3.64          | 8            | (5092)     |
| Cotton (7385)                | 480         | Oakley              | SFM        | PP          | 42.8         | 4.77          | 159          | (5008)     |
| Main Street/Cypress Road     | 481         | Oakley              | MFL        | FP3         | 14           | 8.8           | 123          | 1981       |
| Hasseltine (7164)            | 481         | Oakley              | SFH        | AP          | 3.42         | 5.42          | 16           | (5093)     |
| Garrow (7250)                | 481         | Oakley              | SFH        | AP          | 2.86         | 6.02          | 13           | (5094)     |
| Main Street/Cypress Road     | 481         | Oakley              | SFH        | FP3         | 0            | 5.25          | 0            | 1982       |
| Belleci (7293)               | 481         | Oakley              | SFM        | AP          | 2.5          | 3.68          | 7            | (5095)     |
| 7-1 Saber Development (6865) | 481         | Oakley              | SFM        | FP3         | 10           | 5.067         | 51           | 1983       |
| Isackson Associates (7064)   | 482         | Oakley              | SFH        | AP          | 1.06         | 5.41          | 4            | (5096)     |
| Cypress Road/C. C. Canal     | 482         | Oakley              | SFH        | FP3         | 29           | 5.25          | 152          | 1984       |
| 7-8 Harris Realty (6924)     | 483         | Oakley              | SFH        | FP3         | 30           | 5.667         | 170          | 1986       |
| Carpenter Road               | 483         | Oakley              | SFL        | FP3         | 269          | 2.494         | 671          | 1987       |
| 7-4 Saber (6814)             | 483         | Oakley              | SFM        | FP3         | 13           | 3.231         | 42           | 1988       |
| 7-1 Signature (6872)         | 483         | Oakley              | SFM        | FP3         | 7            | 3.571         | 25           | 1989       |
| Carpenter Road               | 483         | Oakley              | SFM        | FP3         | 10           | 3.75          | 38           | 1990       |
| 7-2 Belleci (6971)           | 483         | Oakley              | SFM        | FP3         | 14           | 4.857         | 68           | 1991       |
| 7-5 Signature (6882)         | 483         | Oakley              | SFM        | FP3         | 34           | 3.765         | 128          | 1992       |
| 7-3 Smith (6845)             | 483         | Oakley              | SFM        | FP3         | 58           | 3.793         | 220          | 1993       |
| 7-7 Michaelides (6941)       | 483         | Oakley              | SFM        | FP3         | 20           | 3.7           | 74           | 1995       |
| AB (7489)                    | 483         | Oakley              | SFM        | PP          | 1.47         | 4.55          | 5            | (5009)     |
| Empire Avenue                | 484         | Oakley              | SFL        | FP3         | 125          | 2.25          | 281          | 1996       |

Table 6-16 (Continued)

|                            | Traffic     |                     | Land       | Trans.      | Gross        | Density       | Housing      | Trans.     |
|----------------------------|-------------|---------------------|------------|-------------|--------------|---------------|--------------|------------|
| <u>Project Identifier</u>  | <u>Zone</u> | <u>Jurisdiction</u> | <u>Use</u> | <u>Type</u> | <u>Acres</u> | <u>or FAR</u> | <u>Units</u> | <u>No.</u> |
| Downtown                   | 486         | Oakley              | SFH        | FP3         | 14           | 5.25          | 74           | 2024       |
| AB (7365)                  | 487         | Oakley              | MFL        | AP          | 16.4         | 9.91          | 130          | (5097)     |
| JE (7163)                  | 487         | Oakley              | MFL        | AP          | 7.05         | 11.93         | 52           | (5098)     |
| ATSF/Cypress               | 487         | Oakley              | SFH        | FP3         | 0            | 5.25          | 0            | 2025       |
| Helix/Olson (7484)         | 489         | Oakley              | SFH        | AP          | 1            | 5.88          | 4            | (5099)     |
| Oakley                     | 489         | Oakley              | SFH        | FP3         | 9            | 5.25          | 47           | 2028       |
| Oakley                     | 489         | Oakley              | SFM        | FP3         | 89           | 3.75          | 334          | 2029       |
| AB (7364)                  | 489         | Oakley              | SFM        | PP          | 6            | 3.67          | 22           | (5010)     |
| S. Oakley                  | 490         | Oakley              | SFH        | FP3         | 221          | 5.25          | 1,160        | 2030       |
| 7-2 Saber (6954)           | 490         | Oakley              | SFH        | FP3         | 20           | 5.2           | 104          | 2031       |
| 7-1 Steadman (6953)        | 490         | Oakley              | SFH        | FP3         | 28           | 4             | 112          | 2032       |
| S. Oakley                  | 490         | Oakley              | SFL        | FP3         | 20           | 2.25          | 45           | 2033       |
| Belleci (7539)             | 490         | Oakley              | SFL        | PP          | 10           | 3.11          | 23           | (5011)     |
| S. Oakley                  | 490         | Oakley              | SFM        | FP3         | 11           | 3.75          | 41           | 2034       |
| Sand Hill                  | 491         | Oakley              | MFL        | FP3         | 56           | 8.8           | 493          | 2036       |
| 7-2 Jonathon (6913)        | 491         | Oakley              | MFM        | FP3         | 21           | 7.19          | 151          | 2037       |
| 7-3 Steadman (6922)        | 491         | Oakley              | SFH        | FP3         | 30           | 5.667         | 170          | 2038       |
| Sand Hill                  | 491         | Oakley              | SFH        | FP3         | 10           | 5.25          | 53           | 2039       |
| 7-1 California Land (6927) | 491         | Oakley              | SFH        | FP3         | 10           | 5.1           | 51           | 2040       |
| Belleci (7396)             | 491         | Oakley              | SFL        | PP          | 18.3         | 2.84          | 39           | (5012)     |
| Belleci (7390)             | 491         | Oakley              | SFL        | PP          | 15.1         | 2.65          | 30           | (5013)     |
| Belleci (7200)             | 491         | Oakley              | SFM        | AP          | 14.92        | 2.71          | 29           | (5100)     |
| Sand Hill                  | 491         | Oakley              | SFM        | FP3         | 0            | 3.75          | 0            | 2041       |
| Sand Hill                  | 491         | Oakley              | SFVL       | FP3         | 10           | 0.75          | 8            | 2042       |



Table 6-16 (Continued)

|                           | Traffic     |                     | Land       | Trans.      | Gross        | Density       | Housing      | Trans.     |
|---------------------------|-------------|---------------------|------------|-------------|--------------|---------------|--------------|------------|
| <u>Project Identifier</u> | <u>Zone</u> | <u>Jurisdiction</u> | <u>Use</u> | <u>Type</u> | <u>Acres</u> | <u>or FAR</u> | <u>Units</u> | <u>No.</u> |
| Knightsen                 | 492         | Other EC            | SFM        | FP3         | 6            | 3.75          | 23           | 2043       |
| Belleci (7431)            | 492         | Knightsen           | SFVL       | PP          | 91.6         | 0.13          | 9            | (5014)     |
| Byron                     | 492         | Other EC            | SFVL       | PP          | 91.6         | 0.75          | 69           | (5101)     |
| W. Bethel Island          | 493         | B. Isle             | SFH        | FP3         | 219          | 5.25          | 1,150        | 2051       |
| W. Bethel Island          | 493         | B. Isle             | SFL        | FP3         | 17           | 2.25          | 38           | 2053       |
| Byron & Murphy (7434)     | 493         | B. Isle             | SFVL       | PP          | 179          | 0.62          | 83           | (5015)     |
| Bethel Island             | 494         | B. Isle             | SFH        | FP3         | 7            | 5.25          | 37           | 2063       |
| Conner Property (3060-87) | 494         | B. Isle             | SFL        | AP          | 126          | 0.52          | 66           | (5102)     |
| JE (7139)                 | 495         | Oakley              | MFL        | AP          | 7.53         | 11.99         | 80           | (5103)     |
| Delta Coves (6013)        | 495         | B. Isle             | MFL        | AP          | 7.1          | 9.15          | 65           | (5104)     |
| Delta Coves (6013)        | 495         | B. Isle             | MFL        | AP          | 61           | 8.08          | 495          | (5105)     |
| East Bethel Island        | 495         | B. Isle             | MFL        | AP          | 10           | 8.8           | 88           | (5106)     |
| East Bethel Island        | 495         | B. Isle             | MFL        | FP3         | 0            | 8.8           | 0            | 2073       |
| East Bethel Island        | 495         | B. Isle             | SFH        | FP3         | 0            | 5.25          | 0            | 2075       |
| East Bethel Island        | 495         | B. Isle             | SFL        | FP3         | 540          | 2.25          | 1,215        | 2077       |
| Ranchetts (7491)          | 495         | B. Isle             | SFL        | PP          | 20           | 1.00          | 16           | (5016)     |
| Greenwell/Presco (7519)   | 503         | Byron               | SFVL       | PP          | 60           | 0.13          | 6            | (5017)     |
| Belleci (7129)            | 511         | Byron               | SFVL       | AP          | 114          | 0.09          | 8            | (5107)     |
| AB (7533)                 | 514         | Byron               | SFVL       | PP          | 145          | 0.26          | 26           | (5018)     |
| JE (7106)                 | 515         | Byron               | MFL        | AP          | 20.55        | 7.29          | 113          | (5108)     |
| Discovery Bay             | 515         | Disc Bay            | MFL        | FP3         | 20.5         | 11            | 226          | (5109)     |
| AB (7226)                 | 515         | Byron               | SFL        | AP          | 175.7        | 1.30          | 171          | (5110)     |
| Discovery Bay             | 515         | Disc Bay            | SFL        | FP3         | 175          | 2.25          | 394          | (5111)     |
| AB (7363)                 | 515         | Byron               | SFM        | AP          | 20.66        | 3.55          | 55           | (5112)     |

Table 6-16 (Continued)

|                           | Traffic     |                     | Land       | Trans.      | Gross        | Density       | Housing      | Trans.     |
|---------------------------|-------------|---------------------|------------|-------------|--------------|---------------|--------------|------------|
| <u>Project Identifier</u> | <u>Zone</u> | <u>Jurisdiction</u> | <u>Use</u> | <u>Type</u> | <u>Acres</u> | <u>or FAR</u> | <u>Units</u> | <u>No.</u> |
| Discovery Bay             | 515         | Disc Bay            | SFVL       | PP          | 455          | 0.08          | 20           | (5113)     |
| RD (7535)                 | 517         | Byron               | SFVL       | PP          | 455          | 0.08          | 20           | (5114)     |
| Byron                     | 514         | Other EC            | SFVL       | AP          | 145          | 0.75          | 109          | (5115)     |
| Cypress Corridor          | 488         | Oakley              | SF         | PP          | 1,138        | 2.25          | 2,565        | 5116       |
| Cypress Corridor #        | TBD         | Oakley              | MFL        | PP          | 75*          | 9.6           | 576          | 5117       |
| Cypress Corridor          | 491         | Oakley              | SF         | PP          | 76           | 3.75          | 285          | 5118       |
| Cypress Corridor #        | TBD         | Oakley              | MFM        | PP          | 37.5*        | 16.4          | 493          | 5119       |
| Cypress Corridor          | 492         | Oakley              | SF         | PP          | 115          | 4.95          | 570          | 5120       |
| Cypress Corridor #        | TBD         | Oakley              | MFH        | PP          | 37.5*        | 25.4          | 763          | 5121       |
| DVSP/GPA                  | 380         | DVSP                | SM         | PP          | 430          | 4.8           | 1539         | 7000       |
| DVSP/GPA                  | 380         | DVSP                | ML         | PP          | 164          | 8.8           | 1151         | 7001       |
| DVSP/GPA                  | 394         | DVSP                | SM         | PP          | 128          | 6.5           | 624          | 7002       |
| DVSP/GPA                  | 394         | DVSP                | ML         | PP          | 444          | 6.5           | 2310         | 7003       |
| DVSP/GPA **               | 394         | DVSP                | MH         | PP          | 79           | 21.9          | 1581         | 7004       |
| DVSP/GPA                  | 394         | DVSP                | MU         | PP          | 54           | 3.7           | 200          | 7005       |
| DVSP/GPA                  | 395         | DVSP                | SM         | PP          | 766          | 5.1           | 2868         | 7006       |
| DVSP/GPA **               | 395         | DVSP                | MH         | PP          | 53           | 21.9          | 727          | 7007       |

# based on County General Plan estimates for up to 150 acres of multiple family development in the Cypress corridor.

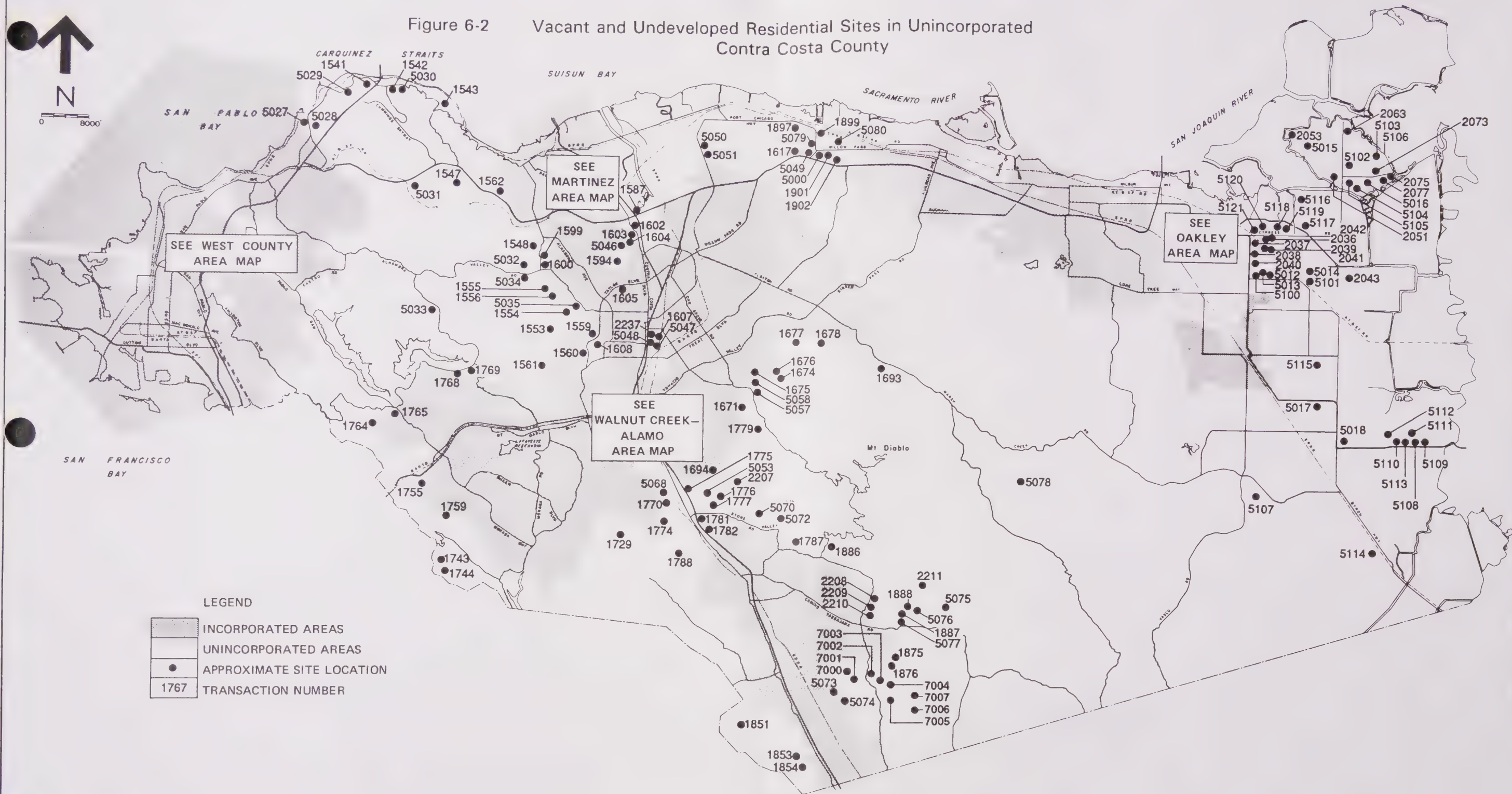
\* based on staff assumptions on the distribution of land among three multi-family land use designations.

\*\* reflect an average density for multi-family high density for the Dougherty Valley Plan area.





Figure 6-2 Vacant and Undeveloped Residential Sites in Unincorporated Contra Costa County



SEE TABLE 6-14, Vacant and Undeveloped Residential Sites in Unincorporated Contra Costa County for more information. (August 1995)





Figure 6-3

# Vacant and Undeveloped Residential Sites in Unincorporated Contra Costa County--West County Area Map

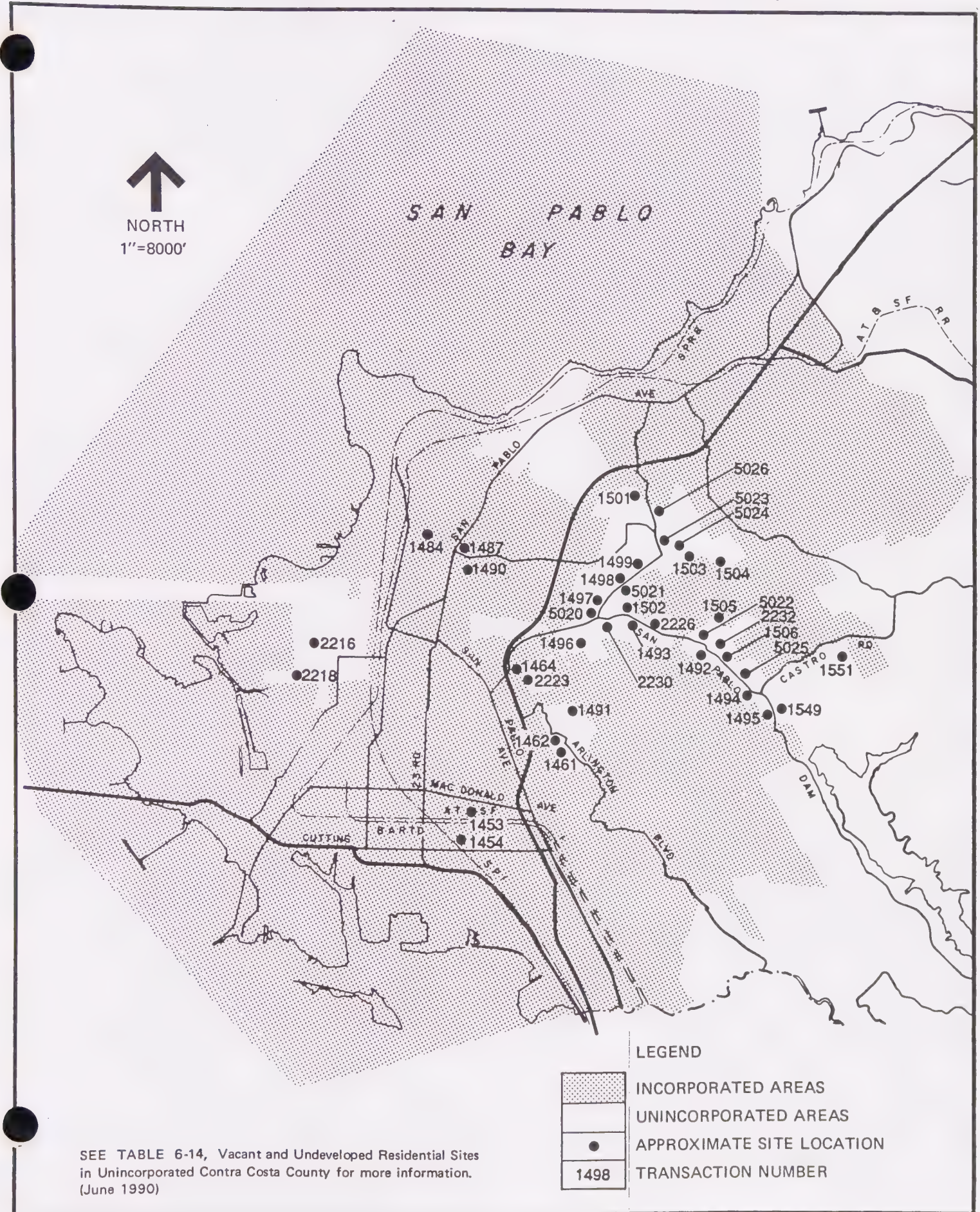




Figure 6-4 Vacant and Undeveloped Residential Sites in Unincorporated Contra Costa County--Martinez Area Map

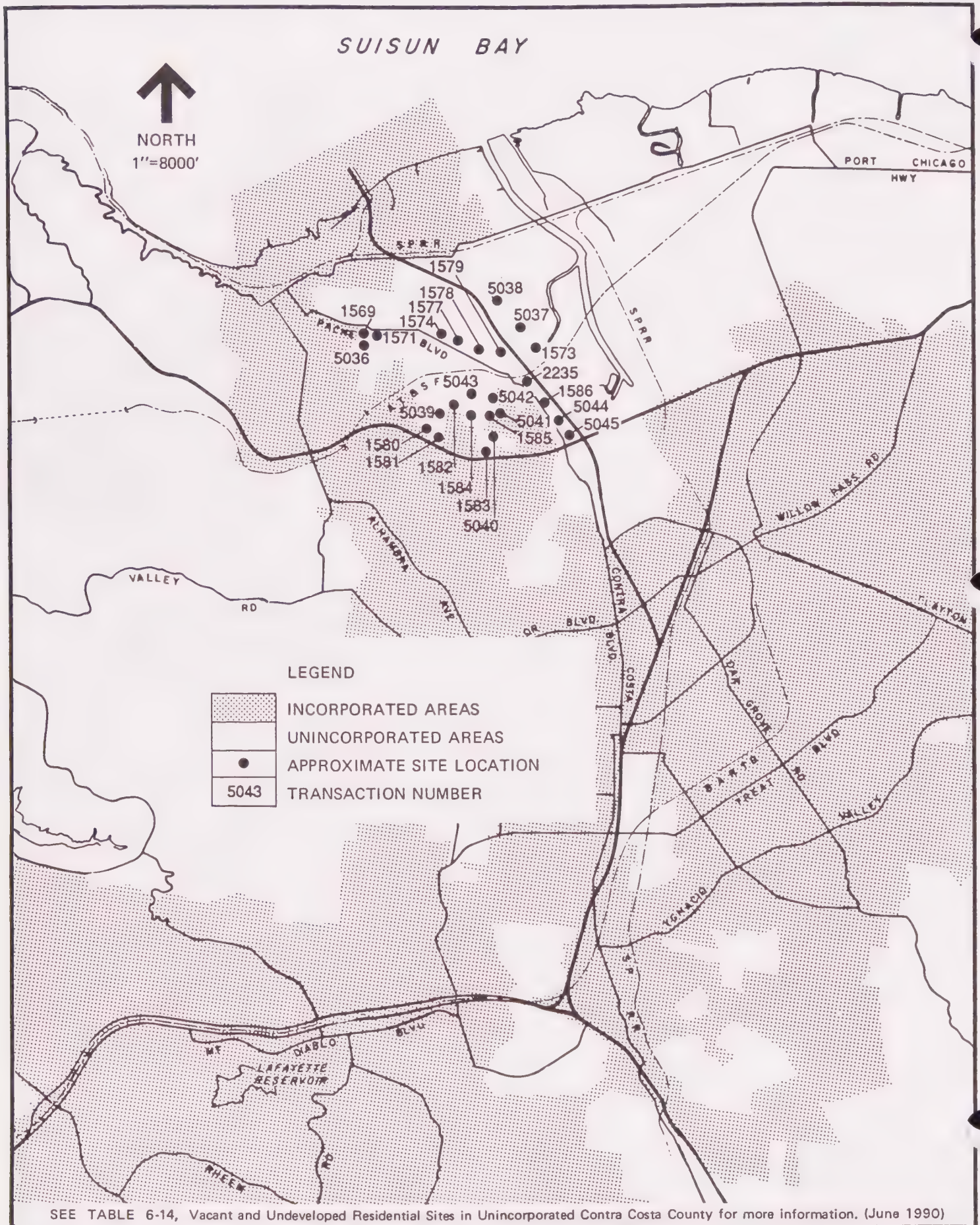




Figure 6-5 Vacant and Undeveloped Residential Sites in Unincorporated Contra Costa County--Walnut Creek-Alamo Area Map

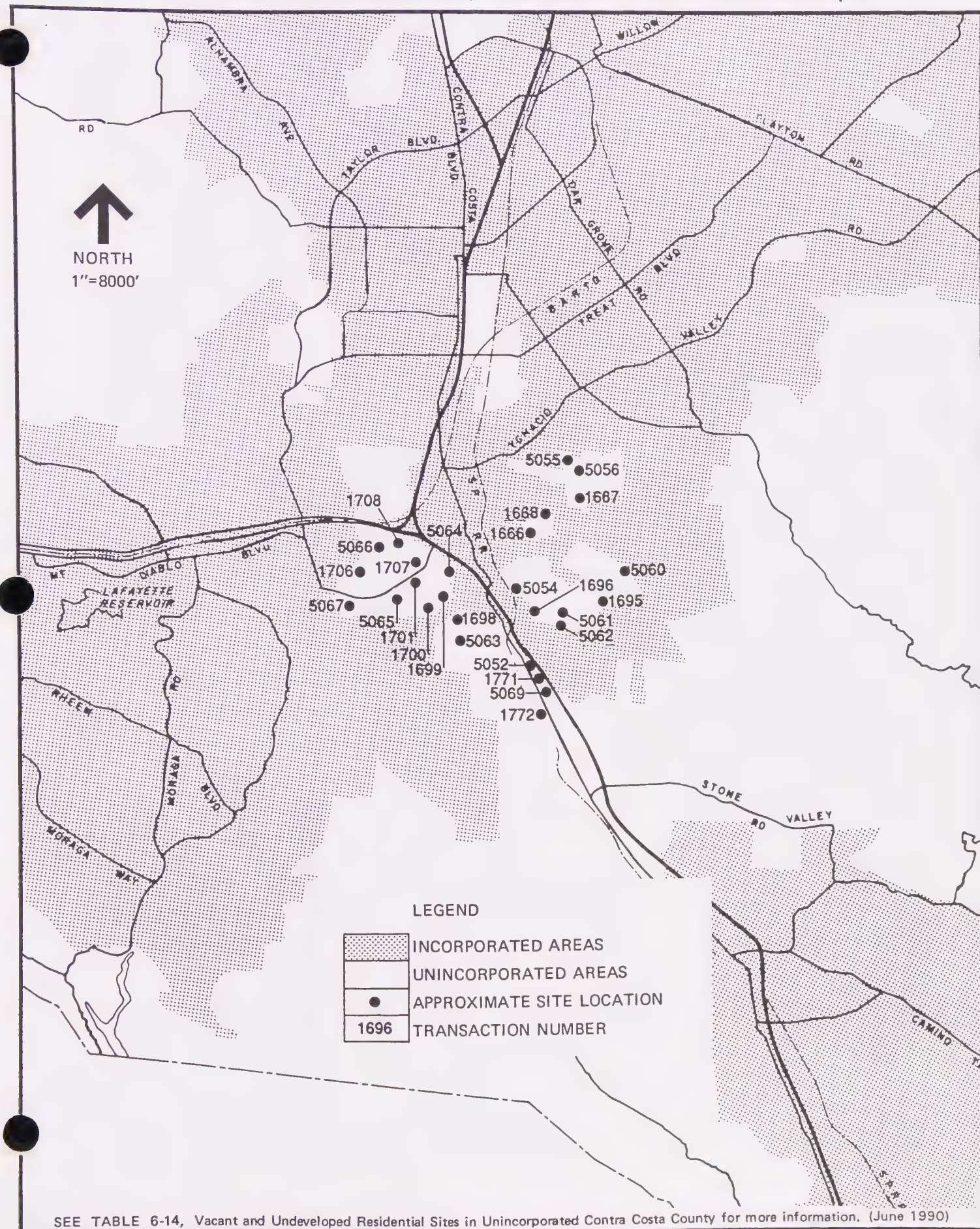
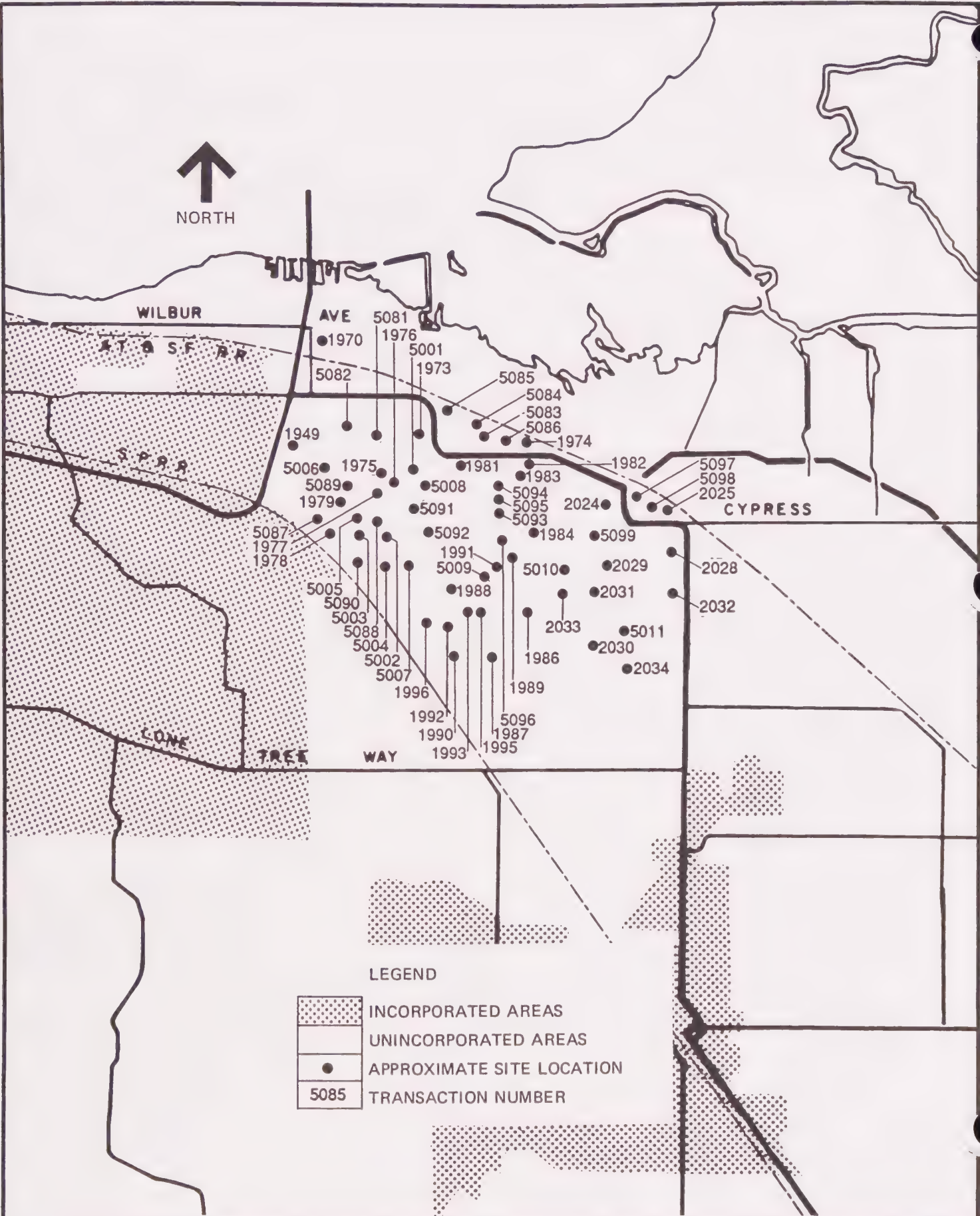




Figure 6-6 Vacant and Undeveloped Residential Sites in Unincorporated Contra Costa County--Oakley Area Map



SEE TABLE 6-14, Vacant and Undeveloped Residential Sites in Unincorporated Contra Costa County for more information. (June 1990)



### Land Use Policies and Controls

Residential development in the unincorporated area of Contra Costa County can occur on land that is designated by the County General Plan for residential uses. In addition, an individual home can be placed on any legal lot except within some industrial areas. As indicated in the Land Inventory section of this chapter, adequate land for projected housing development during the next five years has been designated for residential purposes. This Housing Element is part of this recently-completed comprehensive General Plan revision. In addition, as the need arises, the Board of Supervisors can approve amendments to the General Plan that provide additional capacity for residential purposes by allowing additional residential land area, or additional density in existing residential areas. A variety of General Plan residential designations provide for housing development. These designations range from Single Family Residential - Very Low Density, to Multiple Family - Very High Density and allow residential development at densities ranging from approximately 1 dwelling unit on 5 acres to 100 dwelling units on 1 acre.

The voters, in passing Measure C - 1990, the Contra Costa 65/35 Land Preservation Plan, established a number of provisions that are to ensure that housing policies in this General Plan and related provisions of state law will be followed. While Measure C - 1990 established an ULL, it also provided that a change to the line could occur if the Board finds that the ULL is preventing the County from providing its fair share of affordable housing, or regional housing, as required by state law and the Board finds that a change to the ULL is necessary and the only feasible means to enable the County to meet these state law requirements. Measure C - 1990, in a section on housing, also provides as follows: "As required by the State Planning Act, the County shall periodically review and update the New General Plan to conform to state housing requirements and to ensure its capacity to accommodate a variety of housing types and prices throughout the County.

The new County General Plan's policies govern the County's Zoning Ordinance. Portions of the zoning ordinance will need to be changed to conform to the General Plan. Each zoning district has restrictions regarding density, setbacks and number of units per parcel. Secondary units are allowed in single-family and other residential zones with the issuance of a land use permit. Planned Unit (P-1) zoning may be utilized to allow for flexibility in design and variations in density as long as the overall density is compatible with the General Plan. The County's Zoning Ordinance provides adequate land to allow for residential projects where adequate services and infrastructure can be economically provided. Much of the County's undeveloped residentially designated land is designated Single Family Residential - Low Density.

The provision of affordable housing could be aided by the designation of additional land for higher density housing in areas where adequate services are available. In addition, land use regulations have been adopted that

encourage and simplify the process of providing small "second" units, rental spaces in existing homes. These units could provide some additional housing at minimal cost to provide for the needs of lower income households, smaller one and two-person households that are becoming more common for extended family members, and would aid owners of large and/or high cost homes when the space is no longer needed for a large household.

#### Building Codes and Enforcement

Minimum building standards are essential to ensure safe housing. Excessive safety standards or additional standards controlling or affecting design may increase the cost of housing. Inflexible application of building codes to unique residential facilities such as homeless shelters can add additional costs as well. The County follows the latest adopted Uniform Building Code and the Uniform Housing Code. New construction is reviewed based on these standard codes, which generally reflect current technologies. Renovations are reviewed relative to the flexible Uniform Housing Code, which allows for different construction types so long as minimum health and safety requirements are met. The County has made only minor amendments to its Uniform Housing Code. The amendments are not substantive relative to Code requirements, rather they relate to minor administrative and processing requirements.

#### On- and Off-Site Improvements

Housing projects are generally required to provide all on-site improvements, such as drainage, streets, and sidewalks, that are needed to serve the project. Additionally, housing projects may be required to provide, or contribute financially to, off-site improvements, such as drainage, or major roads, which serve the project's residents as well as the residents of other developments. In many cases, those off-site improvements (capital improvements) are financed by fees. The County's on- and off-site development requirements are not considered to represent constraints to development. The County does not impose any atypical requirements regarding factors such as setbacks, street and curb widths or building heights, nor are off-site requirements considered unduly burdensome. Further, the County provides a summary of all development standards to interested developers, and will hold a pre-application conference to discuss development standards and requirements in advance of the submittal of a development application. (Appendix N)

The Growth Management Element (Chapter 4) of this General Plan works in conjunction with the Land Use Element (Chapter 3) to ensure that development proceeds in a manner that will not negatively affect facility and service standards for existing land uses. In order to carry out the goals of the Land Use Element, new development must demonstrate that the facilities standards of the Growth Management Element will be met. While anticipated that new growth will be able to mitigate these potential impacts, through development fees and

other exactions, it is possible that the timing of project approvals may be affected by the inability of individual developments to carry the fair-share of full-service increments needed to allow further growth in some areas of the County. Thus, the improvements needed to implement the Circulation and Public Facilities and Services Element of the Plan will be directly tied to, and dependent upon, the implementation of the Land Use Plan. Similarly, implementation of the Land Use Element will only proceed when it can be demonstrated that the standards can be met by new development. This inter-relationship should provide for optimal and more cost-effective solutions for the provision of facilities and services necessary to support new development. In addition, the service and facility standards have been developed to achieve the Land Use goals and objectives without requiring non-essential or unnecessary improvements.

### Fees and Exactions

According to a Bay Area Council Study, development fees increased 126 percent between 1981 and 1987, to represent approximately 10 percent of the cost of a new home.

Generally, there are two kinds of fees that must be paid by proposed housing projects. The first kind, and least expensive, are processing fees imposed by several different County agencies including the Community Department, Building Inspection Department, and Public Works Department. Included in this group are environmental review costs. Before Proposition 13, these processing fees were significantly smaller because processing efforts were funded by local government as a public protection function rather than as a service to the applicant. It is now necessary to require that the user of the service pay for the cost of that service. As an example, the County Building Permit and Plan Check fees are \$1,340 for a single family house. Comparable fees in neighboring jurisdictions range from \$956 in Alameda County to \$1,460 in Solano County to \$1,850 in San Joaquin County.

The second kind of fee is collected to provide for services or facilities that serve the residents of housing projects and to offset infrastructure impacts on the surrounding community. Some of these fees are collected directly by the County, such as park, school, drainage and Area of Benefit fees. In areas with approved drainage plans, fees are collected in order to spread the cost of the improvements over all new homes. Park land or "in lieu" park dedication fees of \$400 (\$1,100 in Alamo and \$1,350 in East County) are collected for each new home to provide for land and/or capital improvements to the local park system that will serve the new occupants. School districts that have been determined to lack adequate classroom capacity to serve new developments receive an impact fee from new homes within their district. The fee is based on square feet of assessable space in the new structure and is used to provide temporary structures for classrooms.



In addition to the service and facility fees collected by the County, there are others, such as connection and acreage fees, which are paid directly to utilities and special districts. Some of these are government bodies whose property tax revenue base was eroded by Proposition 13.

Because of variables involved, it is not possible to establish a single fee that reflects development fees across the unincorporated County. A typical example of fees associated with a single family residence would result in a fee of \$11,900 per unit in West County, \$15,999 per unit in Central County, and \$13,574 per unit in East County. By comparison, Alameda County development fees are \$10,254, San Joaquin - \$8,000 (not including park dedication and fire district fees), \$13,220 in the City of Hercules and \$28,850 in the City of San Ramon.

The County is continually assessing the general magnitude and effect of its fees and exactions. The County's Zoning Ordinance allows the Community Development Department to consider the waiver of all or a part of its processing fees for non-profits that are publicly subsidized for public service activities. However, as was noted, these fees constitute a small proportion of the fees paid by housing projects. In December 1989, the Community Development Department inventoried in detail all development fees collected in unincorporated areas for residential development.

#### Processing and Permit Procedures

The cost and availability of residential building parcels is at least partially related to the time and cost required to process proposed residential development projects. Contra Costa County has a system of procedures and requirements in which various components are applicable depending on the status of the project site and the nature of the project proposal. Projects undergo initial determinations regarding General Plan conformance and California Environmental Quality Act status. If the site does not have a General Plan designation that would accommodate the proposed development, a General Plan Amendment must be sought. Amendments to the General Plan are policy matters that ultimately must be approved by the County Board of Supervisors. Environmental reviews proceed concurrently. The second level of procedure requires that the site have the appropriate zoning to allow for the proposed development. Rezoning, if required, can be sought in one of two ways. A simple rezoning changes the land use designation and/or the density, in the case of a housing site, to either a single-family or a multi-family designation that has a set of regulations regarding the manner in which the site can be developed (density, setback, etc.). A Planned Unit rezoning includes both a rezoning and a preliminary development plan for which an approval places specific design and density guidelines on the project. Conventional (residential) projects require Subdivision Map Act approvals. Multifamily developments require development plan approval while single-family developments require subdivision map approval.

The time required to process development applications can vary. It should be underscored that residential developments of under 100 units that are allowed by zoning need not be reviewed by the Planning Commission or Board of Supervisors, rather they are reviewed and approved by the Zoning Administrator. Contra Costa County makes all efforts to process applications in an expedient fashion. In general, the various development applications and processing times are as follows:

|                    |               |
|--------------------|---------------|
| Rezoning           | 3 to 5 months |
| Use Permits        | 3 to 4 months |
| Development Plans  | 3 to 4 months |
| Minor Subdivisions | 3 to 4 months |
| Major subdivisions | 6 months      |
| Variances          | 2 months      |

Applications requiring an Environmental Impact Report will require additional processing time of approximately 6 months. Lot line adjustments and the like can be handled administratively at the time the application is submitted.

Generally, the steps are taken concurrently when more than one entitlement is required for a project, which expedites the processing of projects requiring multiple actions. Portions of this process could be accelerated by allowing more administrative reviews of non-controversial applications and assigning decision making on all but the largest subdivisions to the Zoning Administrator. However, the County's development review process is not deemed a material hindrance to the production or rehabilitation of housing.

#### Federal, State and Local Housing Policy and Programs

Housing has not benefitted from a consistent and cohesive federal strategy; rather, federal programs have moved through various experimentation phases. Four approaches can be identified. First, the 1949 Housing Act called for the demolition of substandard housing; a production strategy was begun in 1968; later, in 1974, a housing conservation strategy was developed; and the Reagan/Bush Administration's view has been that industries, including housing, could thrive unaided in a healthy, unregulated, economy. The manifestation of this philosophy in the housing area has been a massive reduction in programs in which the federal government has subsidized publicly assisted housing. To illustrate in the past decade, allocations for federally subsidized units fell by over 70 percent.

Federal legislation has made a significant contribution to affordable housing in the area of homelessness. The 1987 McKinney Act initiated programs to provide funding for emergency shelters, transitional housing, permanent housing for handicapped populations, and services for the homeless. However, only a fraction of

the initial funding allocations have been appropriated to these programs. Actual appropriations for homeless programs have ranged from 26 to 75 percent of the levels authorized under the McKinney Act. While these programs are critical in addressing immediate needs of the homeless, they do not provide more than temporary solutions since they do not increase low cost housing opportunities overall.

State housing programs have not been dismantled to the extent that federal programs have, due primarily to infusions of new funding approved by California voters in June and November 1988. Proposition 77 generated \$150 million for seismic reinforcements for multifamily housing and rehabilitation of owner occupied and rental housing. Proposition 84 generated \$300 million total for a number of housing programs: \$200 million for new construction of rental housing; \$25 million for acquisition and rehabilitation of residential hotels; \$25 million for emergency shelters; \$15 million for new construction or acquisition/rehabilitation of rental housing with supportive services for families and seniors; \$10 million for migrant farm labor centers; and \$25 million for subsidies to first time home buyers. A third initiative, Proposition 107, adopted in 1990, provides \$150 million to supplement the following Proposition 84 programs: \$100 million for new construction of rental housing; \$15 million for acquisition and rehabilitation of residential hotels; \$10 million for emergency shelters; and \$25 million for first-time home buyer assistance.

A selected summary of programs of the federal and State government is included in Appendix B. The information is normative only and provides no information on the current operational status or appropriation levels.

To the extent that housing needs exist that cannot be addressed by an unsubsidized private sector, responsibility has been consigned to local government by default. Given that cities and counties in California are in extremely tight fiscal circumstances, their ability to initiate and maintain local housing programs is extremely limited. Federal policy constrains local efforts to finance affordable housing development through State caps on mortgage revenue bond financing and on Low Income Housing Tax Credits. Redevelopment tax increment funds for low and moderate income housing represent a major local resource for affordable housing that could become its largest source of funding. The County estimates that a total of \$3,675,000 will be available for low- and moderate-income housing from 1990-1995 as follows: Pleasant Hill BART, \$2.5 million; North Richmond, \$300,000; Bay Point, \$500,000; Oakley, \$250,000; and Rodeo, \$125,000.

While the termination or diminishment of many federal and State housing assistance programs may have generally limited the ability of localities to address housing problems, it has also resulted in the development and use of "innovative" housing programs. By entering into partnerships with the private sector, by accessing funds through private capital markets, by lending, recapturing and leveraging what funds are at their disposal,



and by making greater use of non-financial forms of assistance, the cities and counties can continue to help to alleviate the shortage of low and moderate income housing.

Recent cuts in federal and State housing programs, combined with the substantial increases in housing costs in Contra Costa County, have created a need for additional capital to achieve community affordable housing goals. The establishment of Housing Trust Funds are means by which some communities have closed this financial gap. In its broadest sense, the term Housing Trust Fund refers to a dedicated source of revenue available to assist lower income people achieve affordable housing. Ideally, Housing Trust Funds are ongoing and dedicated exclusively to the production, rehabilitation, or preservation of low and moderate income housing. Funds may be used to meet debt, equity, subsidy, or credit enhancement needs of affordable housing projects.

While Housing Trust Funds are a relatively recent phenomena, three broad categories of revenue sources have emerged:

o Development Ordinances, Fees or Taxes

- Linkage programs. Programs that require commercial and office developers to construct housing or pay an in-lieu housing fee. Boston, Santa Monica and San Francisco have adopted such programs. Such programs have been established as both mandatory or voluntary (subject to negotiation). Including any housing ordinances, with in-lieu fee provisions, would also be an example of a linkage program.
- Preservation Programs. Fees or taxes attached to the conversion of rental units to condominiums or the demolition of housing units. Generation of revenue is usually a secondary objective to preserving the existing housing supply. Burlington, VT and Montgomery County, MD are examples of conversion fees, while Hartford, CN is an example of a demolition-related fee.

o Revenues from Real Estate Activities

- Taxes/fees on Real Estate Transactions. Revenue generated from real estate transfer fees, and fees assessed upon the filing of real estate documents have been established in Dade County, FL; Howard County, MD; Delaware; and Maine.
- Interest Earned on Market-based Accounts. The dedication of revenue from interest earnings on real estate/mortgage escrow accounts have been used in Maryland and Washington State.
- Development Activities. Development can create revenue from special taxes (hotel/motel room tax surcharges are used for affordable housing among other things, in San Francisco) or property tax increments. Redevelopment agencies in California are generally required to dedicate 20 percent of tax increments to achieve low and moderate income housing goals.

## o Program-Generated Revenue

Dedicating revenue or interest earnings from other programs, such as tax-exempt mortgage bond programs are being used in Contra Costa County to further affordable housing goals. Funds are used first to cover expenses of the County in administering housing and community development programs. To the extent surpluses exist, they have been used to assist affordable housing projects.

Any effort to design and adopt Housing Trust Funds must take into account the following components:

- Area housing needs assessment, to review low and moderate income housing requirements for homeowners, renters and special needs population (elderly, handicapped, farmworkers, homeless, etc.) is necessary to achieve political consensus.
- Legal review of pertinent State law and local ordinances, to identify legal obstacles and legal remedies;
- Market analyses and revenue projections for selected revenue sources, to ascertain revenue size and design housing programs accordingly;
- Specification of housing program uses and administration; and
- Political consensus building necessary to adopted selected trust fund proposals.

### Conversion of Assisted Housing to Market Rate

A nationwide problem is the conversion of previously assisted low income rental projects to market rate rental projects. This can occur because of the termination of regulatory agreements that carry affordability requirements or the termination of rent subsidies. For federally assisted rental projects, Congress has recently enacted legislation that will (1) require owners to demonstrate that conversion will not result in hardships; (2) provide additional financial incentives to owners who will retain the affordability restrictions; and (3) provide tenant organizations or non-profit organizations the right of first refusal to purchase the units. In addition, locally assisted (Mortgage Revenue Bond, CDBG, etc.) may also have terminating affordability requirements.

State legislation was adopted as Chapter 1451, Statutes of 1980, which amended Section 65583 of the State of California Government Code to require that each city and county provide an analysis of programs for preserving assisted rental housing developments during a ten-year period. An inventory of all projects with affordable housing units in the unincorporated county was compiled by the Community Development Department. Federally assisted projects were provided from the California Housing Partnership Corporation's "Inventory of Federally-Subsidized Low-Income Rental Units at Risk of Conversion", a list of all state and locally assisted projects were provided from records maintained by the Community Development Department, Redevelopment

Agency, Housing Authority and California Housing Finance Authority (CHFA). The inventory, summarized below, includes those units that could potentially convert to market-rate housing within the 10 years of the planning period (or from 1990 to 2000):

1.     Project:                     Creskide Terrace  
        Location:                 5038 San Pablo Dam Road  
                                       El Sobrante  
        Description:             Type of Residents - 56 units, family  
                                       Type of Assistance - FHA 236  
        Earliest Date of Conversion: December, 1993
  
2.     Project:                     Rivershore Apartments  
        Location:                 1123 Shoreview Court  
                                       Bay Point  
        Description:             245 units financed with tax exempt bonds; 20% affordable - 49 units  
        Earliest Date of Conversion: September 1997, however being extended to November 2002

The affordable units at Rivershore Apartments, which was financed with tax-exempt bonds, are not likely to be converted to market-rate units. The Community Development Department is in the process of refunding the existing bonds and providing new tax exempt bond financing to the property owner in November, 1992. The result of this refinancing effort will be to extend the affordability requirement for 10 more years.

Creskide Terrace is subject to conversion in December, 1993<sup>7</sup>. The development of a new affordable rental housing project to replace these 56-affordable units would be a difficult and expensive undertaking. Therefore, the County has an incentive to minimize the loss of existing affordable rental housing. The current cost of developing a new rental unit is roughly \$60,000. Based on discussions with parties who have been involved in the preservation of affordable rental projects, the public costs of such preservation efforts could be on the order of \$25,000 per unit or greater (renovation, capital subsidy). Therefore, the public financial impact, adjusted for inflation, of mitigating the conversion of this project could be as follows:

|                          | <u>(\$000,000)</u> |
|--------------------------|--------------------|
| Replace/New Construction | \$3.7              |
| Retain with Subsidy      | \$1.5              |

In the event that the property owner seeks to sell the property, there are several potential sources of revenue that the County could harness to assist a local non-profit organization in acquiring the property. The following represents a sample of the types of programs that may be available during the time of potential conversion. The Low-Income Housing Preservation and Resident Homeownership Act of 1990 (LIHPRHA) sets forth guidelines for providing financing "incentives" to owners of federally assisted housing projects. The purpose of LIHPRHA



is to prevent the prepayment of federally-assisted mortgages, extend existing low-income use restrictions, and prevent displacement of low-income residents. Financing incentives offered to owners or purchasers of Creekside Terrace would include increased access to residual receipts, increased Section 8 rents, capital improvement financing, insured equity take-out financing and others. Local resources to supplement these funds could include Community Development Block Grant Funds (CDBG), HOME Funds, Housing Set-Aside Funds, tax exempt bonds and Housing Trust Fund monies. The County receives approximately \$3.4 million annually in CDBG funds, and \$1 million annually in HOME Funds. In 1992 the County Redevelopment Agency's housing set-aside was over \$950,000.

State housing element law requires that the County establish a quantified objective for the maximum number of at-risk housing units that can be preserved during the five-year planning period. The County's quantified objective is to maintain the affordability of both projects cited, or 105 units.

An emerging resource in this area may be the issuance of tax exempt bonds for projects acquired by qualified 501(c)(3) non-profit organizations. A recent survey by the County indicated that a number of Bay Area and County non-profit organizations have interests in this area. Among the non-profits who responded to the survey were Shelter, Inc., Ecumenical Association for Housing, Eden Housing, Pacific Community Services, Volunteers of America, Rubicon, Housing for Independent People, and Rural California Housing Corporation. It would appear that these organizations have the legal and managerial capacity to acquire and manage these housing developments.

## NON-GOVERNMENTAL HOUSING CONSTRAINTS

### Availability of Financing

The most important factor determining the availability of affordable homeownership opportunities is the availability of financing at reasonable interest rates. Interest rates are determined by the market with major contributing factors being the general health of the economy, Federal Reserve Board Policy, the current and expected rates of inflation, federal fiscal policy, among others. Major institutional and regulatory adjustments have also resulted in changes in the magnitude and manner in which the mortgage and financial markets operate. For example, the 1989 savings and loan industry bailout legislation has reduced the availability of construction financing. These factors affect residents and local government alike, but are largely out of the control of both.

The results of the major financial market and institutional shifts of the past decade have been that mortgage financing has risen to historically high rates, and that the rates have been subject to rapid and extreme volatility.

Since the mid 1980's, however, mortgage interest rates have generally declined and stabilized, with predictions of continuing decline in 1990.

Initiatives have been designed to help overcome, to some degree, the constraints imposed by higher rates and uncertainties. Lending institutions have designed new financing instruments, such as adjustable rate mortgages, that increase the availability of financing by shifting some of the interest rate risks from the lender to the borrower. However, these are less attractive than fixed rate mortgages as interest rates decline. Another new form of Federal Housing Administration (FHA) mortgage, the Price Level Adjusted Mortgage (PLAM), offers very low interest rates with payment levels tied to Consumer Price Index increases or decreases but have the disadvantage of negative amortization, i.e. the mortgage balance, or principal, can increase. FHA and Veteran's Administration (VA) mortgages, available with 0 to 5 percent down payment requirements, can eliminate prohibitively large down payments. FHA loans should be more feasible in local housing markets due to recent federal legislation that increased maximum loan limits but generally have limited effectiveness in high-cost housing market areas.

Other new legislation also requires Federal Home Loan Banks to establish affordable housing programs to offer cash advances to lending institutions to provide below market rate financing for low and moderate income housing.

Local and State government have become prominent mortgage lenders through the issuance of tax-exempt bonds. It has been estimated that up to one-third of first time home buyers nationally now purchase homes through mortgage bond programs, and that as much as 10 percent of all long-term residential lending is through such programs. Because of concern over the loss of federal revenue, Congress has indicated that such programs must address a "public purpose" by being directed to and benefiting those who have a need and might otherwise be unserved. This avenue of financing, if not properly policed and executed by local and state governments could be severely restricted or eliminated altogether.

The availability of financing and the interest rates can vary geographically. Certain communities and income groups can be under served by the financial community. Regulatory requirements on these financial institutions do require community lending activities. The County has contacted the following agencies in determining that there are no areas currently under-served by the lending institutions: (1) City of Richmond, (2) City of Pittsburg, (3) Federal Reserve Bank, San Francisco, (4) Federal Home Loan Bank, San Francisco, (5) Federal Deposit Insurance Corporation, (6) Office of the Controller of Currency and (7) Office of Thrift Supervision. In addition, interest rates being offered by lending institutions in the County do not appear to vary significantly

within the County, or from interest rates in other counties. The statement should not be construed to mean that identical projects in discrete market areas of the County would be able to obtain the exact same commitments from the financial community. The underlying economics of the localized housing market and the project do result in differing outcomes.

### Price of Land

Land prices in the Bay Area and Contra Costa County are among the highest in the nation. Escalating land costs are a major contributor to the increased cost of housing. Developers estimate that land costs have tripled since 1980, to make up 19 percent of a typical Bay Area development costs. A 1986 State Department of Housing and Community Development survey of California development costs found land to be approximately 10 percent of the development costs for single-family homes in East Contra Costa County and 16 percent for multi-family development countywide.

Determining an average raw land cost in the County is not readily feasible. Variables affecting properties (topography, shape, land area, zoning/General Plan designation) can result in widely varying land prices. The geographic location of the property within the County can also greatly influence land value. A 1990 valuation investigation of unimproved residential land conducted for the County's Park Dedication Ordinance review found that land values in East County varied from as low as \$47,500/acre to as high as \$113,600/acre (\$8,500/lot to \$36,000/lot); in North Central County from a low of \$31,200/acre to as high as \$131,400/acre (\$20,000 to \$53,000/lot); in South Central County from a low of \$72,400/acre to a high of \$306,100/acre (\$38,500/lot to \$200,000/lot); and in West County from a low of \$56,000/acre to a high of \$241,000/acre (\$9,600/lot to \$35,700/lot).

Raw land for single-family development in West County typically ranges from \$7,500 (North Richmond) to \$90,000 (El Cerrito, Pinole, and Kensington) per lot. Richmond and Pinole provide mid-range land prices of \$20,000 to \$50,000 per single-family lot. Land prices for large multifamily projects range from \$8,000 to \$17,000 per unit in Richmond. Raw land costs for a single family developments in Central County range from \$15,000 to \$40,000 per lot in Concord, to \$90,000 per lot in San Ramon. East County raw land costs range from \$25,000 per lot in Brentwood to \$60,000 per lot in Oakley.

Land costs per housing unit often can be reduced by increasing housing unit density. However, since land costs reflect market demand, increasing the intensity of land use (its "highest and best use") can result in higher land values. Allowing higher density residential land use in general plans and zoning ordinances is also no guarantee that such land uses will result; for instance, there are examples of land zoned for multi-family uses being built



out at single-family densities. A means of avoiding under building would be to require development to occur at the minimum intensity allowed under the General Plan. This has been accomplished in some areas, most notably, the Pleasant Hill BART Station area. Density bonuses beyond that allowed under the General Plan are available in exchange for the provision of affordable or senior housing.

In some instances, a local government can facilitate the production of low and moderate income housing through the direct means of lowering land costs. For example, land write-downs to developers can reduce production costs. In addition, the county and other public agencies may have surplus property that can be made available for residential uses.

### Construction Costs

Construction costs are now rising at the rate of inflation. The U.S. Bureau of Labor's Producer Price Index of materials and components for construction has increased less than 3 percent per year since 1985. In the late 1970's, however, construction costs were rising at approximately 10 percent per year. Construction costs have decreased as a percentage of total development costs, due to increases in land and financing costs. A 1986 HCD survey of California development costs found direct construction costs to be slightly over 50 percent of the total development costs for both multi-family and single-family homes in Contra Costa County. The Contra Costa County Board of Realtors and local developers estimate hard construction costs to be \$50 to \$60 per square foot.

It is interesting to note that recent design and affordable housing contests have discovered that the conventionally and factory-built home, using mostly standard materials, are best able to keep costs down. Exotic materials and futuristic designs have not competed well from the standpoint of construction costs. One long-standing and successful technique for reducing construction costs is the use of manufactured or factory-built housing. A related technique is to pre-cut lumber for conventional assembly on the building site. Among the major reasons that manufactured or pre-cut homes may be more affordable is that they may cost less to produce and that construction time and, hence, the time construction financing costs must be carried by the developer are significantly reduced. Manufactured housing may be used on any residential property in the County, subject to the same conditions as conventional stick-built housing.

### Neighborhood Concerns

Residents of Contra Costa County have long had a high level of awareness of public issues, and an inclination to participate in the public decision-making process. This tendency to become involved in public activities is compatible with State law, which provides for the public to be involved in planning through public meetings and hearings.

An important reason for the high incidence of public participation is the prevailing concern for the preservation of existing residential neighborhoods and property values. This is true of neighborhoods in all income ranges, whose residents almost universally fear high densities, new types of residential buildings, renters, and homeless people.

Residents of communities also seem to acknowledge housing problems, but have a difficult time supporting available solutions. According to a 1985 Bay Area Council poll, residents of the Bay Area concurred overwhelmingly (71 percent) with the premise that new housing should be encouraged; however, only 52 percent agreed that the housing should be encouraged in their community. This "split personality" of the public increases the complexity of new housing development and may, depending on the added time or costs of dealing with public concerns, add to the price of new housing. The individual issues include density, design, traffic, noise, fiscal effects, or other environmental concerns. While these all are legitimate concerns, the balancing that occurs with respect to the planning process is at the expense of affordable home prices. Efforts are underway to increase and mobilize public support toward housing, including increased cooperation and communication among residents, builders, and local officials, and to organize pro-housing coalitions. Housing has become a higher priority. In a 1980 Bay Area Council poll, almost 20 percent of the respondents saw housing as the most serious Bay Area problem, versus less than 10 percent three years before.

The County can address much of its affordable housing needs by avoiding the loss of its existing homes and neighborhoods. One method of preserving existing neighborhoods and their homes is to develop area general plans for communities. The County has historically developed these plans for its distinct communities, most recently in Bay Point, Oakley, and North Richmond. This practice is to be encouraged and strengthened as a means of maintaining the sense of maturity and stability, and to ensure that new development that occurs within and adjacent to these neighborhoods is compatible with community goals and countywide goals and objectives. In two instances, East County and the San Ramon Valley, the County has created Regional Planning Commissions to provide for increased local public participation.

A second method of preserving communities is by setting and implementing local comprehensive improvement efforts. Within existing lower income communities, CDBG funds have been used effectively to undertake high priority capital improvements necessary to protect the health and welfare of residents. Such targeting to high priority projects should be continued. Capital improvement efforts through other funds should also be undertaken in a consistent and complementary fashion. The capital improvements efforts often implement community facility plans that have been developed for portions of the County.

Improvements to the housing stock will also help keep the existing housing affordable and neighborhoods viable. Rehabilitating and preserving existing housing through the provision of financial assistance is an important and historically successful means of maintaining neighborhoods. The County's residential rehabilitation programs are largely conducted with funding from the CDBG program. To the extent that lower income persons tend to be renters, priority should be given to incentive programs designed to assist rental property owners, consistent with achieving affordable housing.

A phenomenon of the late 1970's and early 1980's was the conversion of existing apartments to condominiums. While no consensus exists as to the extent and importance of the effects, three have been identified: first, the effect of conversions on existing tenants; second, buyer protection concerns; and third, effects on the availability and price of rental housing in general. Condominium conversion activity has been lessened between the period 1978 to 1982 and has become almost non-existent since then.

The County adopted an ordinance designed to protect tenants and buyers by specifying information submittal requirements, establishing certain minimum standards for conversion, requiring tenant protection measures to mitigate hardships, and requiring certain findings before conversion approval.

The high demand for housing has put increasing pressure on the existing supply of rental units. High rents, combined with the diminished supply due to condominium conversions and the low volume of new rental construction, have continued to be serious problems in many Contra Costa County communities. Political pressures in communities with similar conditions outside the County have resulted in enactment of rent control ordinances. In essence, communities are confronted with the dilemma of how to balance the needs of renters, particularly lower income renters, who experience hardships, with the free enterprise system of property ownership. In Contra Costa County, however, there is no consensus among local elected officials that rent control is an action appropriate for solving rental housing problems.

Low-income housing, particularly rental housing, has the additional obstacle of being subject to local voter approval. In 1950, the voters of California added Article 34 to the State Constitution, which requires that low rent housing projects developed, constructed, or acquired by a State public agency, which includes local jurisdictions and housing authorities, must first receive local voter approval. According to a report by the State Department of Housing and Community Development, Article 34 has constrained the development of low and moderate income rental housing, particularly family housing. A recent court case temporarily jeopardized local ability to obtain Article 34 approval, but was overturned by the State Supreme Court. California is one of the few states in the nation to have such a referendum requirement for low income housing.



### Discrimination

Local housing counseling organizations report that housing discrimination against families with children is the most commonly reported complaint. Discrimination on the basis of race or ethnic status also continues to prevent at least some local residents from renting or buying the home of their choice, judging from complaints received by housing organizations. Discrimination due to age, family status, source of income, religion, sex, disability, and other arbitrary factors also occurs according to the fair housing counseling agencies in this County.

While federal and State law is clear on this subject, discrimination continues to occur because enforcement has only rarely been pursued by the appropriate agencies. The Fair Housing Amendments Act of 1988 improved enforcement of fair housing laws, expanded fair housing law to cover mentally and physically disabled persons and to cover families with children, and required handicapped accessibility features in newly constructed multi-family housing as of March 1991. Most senior housing developments are exempt from the provisions regarding discrimination against families. The Act also restricts a local jurisdiction's ability to prohibit group homes through land use regulations, such as requiring special or conditional use permits. Group homes can only have the same land use permit requirements as a single-family home.

The California Housing Financial Discrimination Act prohibits redlining, the practice by which lending institutions systematically exclude funds from certain neighborhoods, and provides financial remedies to complaints who have experienced discrimination. Various State departments (Departments of Savings and Loans, Real Estate, and Banking) take discrimination complaints for such cases. Private and non-profit organizations provide information, referral, counseling, and legal assistance to individuals on fair housing issues. The County also has two California Housing Resource Boards that engage in fair housing education and monitoring. In recognition of the fact that a Fair Housing Dissemination Program is necessary to guarantee utilization of available programs, the County annually establishes by resolution a Fair Housing Week. In conjunction with adoption this resolution, the County engages in the release of publicity materials regarding the availability of agencies to assist in investigating and remedying discrimination complaints. On an on-going basis, the non-profit fair housing organizations with whom the County contracts undertake an information dissemination program that includes press releases and the provision of information at central locations such as libraries, post offices and other community facilities.

## 6.9 ENERGY CONSERVATION IN RESIDENTIAL DEVELOPMENT

Energy conservation in residential construction in California is regulated by the California Energy Commission through Title 24 of the California Administrative Code (State Building Code). State conservation standards for new low rise residential buildings and additions were revised in 1982 in response to rising energy costs and new technologies in energy conservation, included new conservation features that must be installed in new residential buildings and greater flexibility in meeting the standards. The Code divides the State into climate zones, reflecting topographic and climatological variations.

Contra Costa County is divided into Zones 3 and 12. Zone 3 is a relatively Mediterranean climate in which the primary aim of the regulations is to allow winter sun into the housing unit, thereby reducing the winter heating loads of utilities. The Zone 3 area is located along the northern rim of the County, north of State Highway 4 from the Antioch Bridge to Martinez, then southwest to San Pablo Dam Road in West County.

Zone 12, which includes all of the interior of the County, is located south and east of Zone 3. This area is subjected to higher summer temperatures. The primary aim of the regulations here is to prevent the summer sun from entering the structure and to minimize the use of air conditioning through insulation, control of south-facing glazing and through window shading.

In Contra Costa County, energy budgets for new structures and additions are specified in an energy compliance inventory. The inventory specifies compliance of building design for gross floor area; roof/ceilings; walls; glazing; moveable insulation; thermal mass; conventional heating and air conditioning equipment; lighting; solar space and domestic hot water heating; and fireplaces. Standards are enforced by the County Building Inspection Department.

In addition to building standards required by Title 24, the development application review process has the potential to contribute to energy conservation through site design and development plan review, when the following measures are included:

- o minimized paved areas and utility and drainage lines,
- o lot orientation with regard to the sun (winter gain, summer avoid),
- o utilization of south facing glazing,
- o avoidance of paving adjacent to buildings,
- o minimized grading,
- o use of natural light and ventilation,
- o solar water heating,

- o provision of hiking and biking trails,
- o provision of wind breaks,
- o shaded west walls,
- o use of deciduous shade trees and drought-tolerant plants,
- o neighborhood pools and other recreation facilities,
- o use of high-efficiency mechanical systems and appliances,
- o provision of street shade trees,
- o encouragement of public transportation,
- o use of energy-efficient building materials, e.g., wood vs. aluminum
- o use of better insulation, and
- o use of glazed windows.

In addition to educating developers on the advantages of energy conservation in project design, local government can extend priority processing to applicants incorporating significant energy conservation features in projects. Localities can also improve energy conservation by encouraging development patterns that reduce automobile use for commuting to employment, such as higher density infill development, mixed used land uses, and job/housing balance policies.

Energy conservation can be encouraged in existing development through weatherization and rehabilitation loan programs. The County's Department of Community Services operates an Energy Crisis Intervention Program that assists approximately 3,000 very low and low income households per year by providing education on energy conservation, minor weatherization improvements (up to \$1,600) to the home, and utility payment assistance. These improvements include ceiling insulation, door and window weather stripping, broken door and window repairs, low-flow showerheads, water heater insulation, thermostats, caulking, and turbine vents.

Energy-efficiency measures in a house can be much more effective if combined with energy saving practices by the building occupant. PG&E offers rate alternatives that provide price incentives for reducing electrical use during the peak hours. For residential users, these rates are called "time-of-use" rates. The rates require a special meter that is capable of tracking electrical use by time of day. Local government can encourage energy efficiency by requiring or providing incentives to developers to install "time-of-use" meters.

Energy conservation is also an affordability issue. After rent or mortgage payments, energy costs represent the greatest housing cost (ranging from 20 to 30 percent of all housing costs). Energy costs are a greater burden for lower income households, who pay 3 to 4 times as much per dollar of income than typical households, according to an Alliance to Save Energy study entitled Energy Efficiency: A Key to Affordable Housing, dated



January 28, 1988. While low income households benefit the most from energy cost reduction measures, energy efficient features tend to be found in higher income owner occupied single-family homes. According to a Department of Energy 1984 Residential Energy Consumption Survey, multifamily households use 40 percent more energy per square foot, which can be attributed to the lack of energy conservation features in multifamily buildings.

Energy efficiency measures are cost effective; i.e. they yield cost savings that far exceed the initial investment in terms of energy retrofitting or energy conservation in new construction. Energy use in new energy efficient homes can cut energy use by 75 percent. However, because landlords typically do not pay utility bills, there is less incentive for rental property owners to include energy conservation features in rental developments. Localities could require these features when rental properties change ownership.

## 6.10 GOALS, POLICIES AND IMPLEMENTATION MEASURES

### Background

The following goals, policies, and programs have been adopted in an attempt to meet the County's regional housing needs, and they are consistent with the County's Redevelopment Agency programs and plans. Goals are aspirations that motivate people to plan and carry out action programs. Typically, goals are general, commonly held and long-range ideals, and are expected to provide ongoing direction rather than to be achieved. Goals, however, lead to policies and objectives, which are specific, often quantified, and are intended to be achieved.

The overall goals and objectives included in the 1985-1990 housing element were generally continued into this planning period, although they have been consolidated, and the format has been modified. The majority of the programs have been revised to more adequately meet the County's housing needs. Specifically, this includes a more detailed and proactive description of the actions associated with each program. For example, program 1e in the previous Element called for "encouraging second units". The new program 1.3 calls for publicizing the revised secondary unit program that allows for priority processing and, where appropriate, parking variances to encourage second units.

Few programs were eliminated from the previous Housing Element. Programs were eliminated because they have been completed, such as Program 1a, which called for a review of the General Plan (the General Plan was revised in 1991), or because they were not proactive or were more representative of a policy and not an action, such as Program 3i, which called for maximizing financial leverage. Program 12d, which had called for exploring the feasibility of postponing property tax adjustments on housing rehabilitated with public funds, was

removed due to budgetary constraints, as was Program 12k, which called for the County to study safety measures of older mobile homes. Further, some programs were removed as they were not action-oriented, but rather were general statements of support and encouragement for the continued development of market-rate and affordable housing.

## **GOAL 1: HOUSING PRODUCTION**

TO PROVIDE HOUSING TO MEET THE PRESENT AND FUTURE NEEDS OF RESIDENTS IN THE COUNTY OF CONTRA COSTA, AND TO AIM AT PROVIDING A FAIR SHARE OF THE MARKET AREA HOUSING NEEDS, WITHIN IDENTIFIED GOVERNMENTAL, MARKET, ECONOMIC AND NATURAL CONSTRAINTS.

### **Policy 1.1: Fair Share Housing Production**

On a Countywide basis, attempt to increase the number of housing units to meet the need for additional housing during the 1990-1995 period. Contra Costa County's unincorporated quantified objective is based on ABAG's determination of Contra Costa County's fair share of housing by income groups as illustrated below:

**UNINCORPORATED CONTRA COSTA COUNTY QUANTIFIED OBJECTIVE  
BASED ON REGIONAL NEEDS: 1988-1995**

|                                   | <b>Total New<br/>Construction</b> | <b>Very Low<br/>Income</b> | <b>Low<br/>Income</b> | <b>Moderate<br/>Income</b> | <b>Above Moderate<br/>Income</b> |
|-----------------------------------|-----------------------------------|----------------------------|-----------------------|----------------------------|----------------------------------|
| ABAG's Determination<br>1988-1995 | 6,447                             | 1,289                      | 903                   | 1,289                      | 2,966                            |
| Annual Share                      | 921                               | 184                        | 129                   | 184                        | 424                              |

#### **Program 1.1: Developer Outreach**

**Action:** Meet with the local development community, key lenders and local civic and community groups to promote the County's interest in working cooperatively to increase housing development activity. Promote the utilization of the County's pre-development application conference.

**Objective:** To expedite and support the development of market-rate and non-market-rate housing.

Responsible Dept.: Community Development Department and Redevelopment Agency  
 Financing: Application fees, Housing Program Administration funds.  
 Time Frame: Written materials on mortgage revenue bond program completed in 1992. Pre-Development Application Conference capabilities established in 1992. Maintain and expand outreach efforts.

**Program 1.2: Expedited Review for Subdivisions with Under 100 Units.**

Action: Allow development application review to be completed by zoning administrator for all projects in conforming zoning with less than 100 units. Applies to 95 percent of all projects.

Objective: To reduce review process by 2-3 months.

Responsible Dept.: Community Development Department

Financing: Application Fees

Time Frame: Ongoing

**Program 1.3: Second Units**

Action: Publicize the revised Secondary Unit Program to increase public awareness. 1991 amendments include priority processing and potential for parking variances.

Objective: Increase production of second units as an affordable housing alternative. Average 20 new secondary units annually, or 100 between 1990 and 1995.

Responsible Dept.: Community Development Department

Financing: Application fees

Time Frame: Ongoing

**Program 1.4: Change All Residential Zoning Categories to Planned Unit Development (P-1) in Conformance With General Plan.**

Action: County will initiate zone changes for residential sites. Will streamline entitlement process for development applications.

Objective: Increase housing supply, limit processing time, and increase design flexibility for new residential developers.

Responsible Dept.: Community Development Department

Financing: Application fees, general fund

Time Frame: 1993

**Program 1.5: Encourage Use of Planned Unit Development (P-1) Zoning**



|                     |  |
|---------------------|--|
| Action:             | Publicize P-1 program parameters.  |
| Objective:          | Increase development flexibility and minimize need for Planning Commission and Board of Supervisor review.   |
| Responsible Dept.:  | Commercial Development Department  |
| Financing:          | Community Development Department   |
| Time Frame:         | Ongoing  |
| <b>Program 1.6:</b> | <b>Mobile Homes/Manufactured Housing</b>   |
| Action:             | Continue to approve these housing types on permanent foundations in residential neighborhoods subject to design review.                                      |
| Objective:          | Provide for affordable housing options.  |
| Responsible Dept.:  | Community Development Department   |
| Financing:          | None required  |
| Time Frame:         | Ongoing  |
| <b>Program 1.7</b>  | <b>Review Status of Agricultural Land for Residential Uses</b>   |
| Action:             | 1991 General Plan update converted acreage from agricultural to residential uses. Rezone agriculturally zoned sites to P-1 to accommodate residential uses.  |
| Objective:          | To create appropriate alternate uses for lands to be removed from agricultural uses and expedite residential development.                                    |
| Responsible Dept.:  | Commercial Development Department, Redevelopment Agency  |
| Financing:          | General Fund   |
| Time Frame:         | General Plan revised in 1991. Zoning amendments by end of 1993.  |
| <b>Program 1.8:</b> | <b>Establish Minimum and Maximum Densities for All Residential Districts.</b>  |
| Action:             | As part of 1991 General Plan update, Land Use element was modified to include minimum and maximum densities for each residential land use category.          |
| Objective:          | To ensure that resident development potential is not reduced by development of parcels at substantially lower densities than prescribed by the General Plan. |
| Responsible Dept.:  | Community Development Department   |
| Financing:          | General Fund   |
| Time Frame:         | Revision completed   |
| <b>Program 1.9:</b> | <b>Complete Comprehensive Review of Zoning and Subdivision Ordinance</b>   |

|                    |  |
|--------------------|--|
| Action:            | Comprehensive review for consistency of ordinances with state law and General Plan as well as for ease of use. |
| Objective:         | Clarify submittal requirements and standards.  |
| Responsible Dept.: | County Counsel, GMEDA, Community Development Department  |
| Financing:         | Staff time   |
| Time Frame:        | Complete review by 1993  |

**Program 1.10: Land Use/Vacant Land Inventory**

|                    |   |
|--------------------|---|
| Action:            | Annually monitor and update vacant land inventory for dissemination to the development community.   |
| Objective:         | The land inventory, developed as part of the housing element update, provides the means to monitor the availability of vacant and underutilized land to accommodate housing on a regular basis. |
| Responsible Dept.: | Community Development Department  |
| Financing:         | General Fund  |
| Time Frame:        | Ongoing. Most recent update November 1992.  |

**GOAL 2: HOUSING AFFORDABILITY**

TO PROVIDE HOUSING TO MEET THE NEEDS OF ALL INCOME GROUPS IN THE COUNTY, AND TO PROVIDE THE FAIR SHARE ALLOCATIONS BY INCOME CATEGORY WITHIN THE IDENTIFIED GOVERNMENTAL, MARKET, ECONOMIC AND ENVIRONMENTAL CONSTRAINTS.

**Policy 2.1: Affordable Housing Opportunities**

The County shall implement programs to increase affordable housing opportunities, preserve the existing stock of affordable rental housing, including the 105 units of subsidized rental housing subject to conversion to market rate housing, and promote alternative housing types.

**Program 2.0: New Construction**

|         |   |
|---------|---|
| Action: | Direct private and nonprofit housing developers to County for HOME and the CDBG Program funds. Where applicable, use County Redevelopment Agency set-aside funds. Program funds can be used to facilitate new development and special housing needs for very-low and low-income households by financing predevelopment, site acquisition, site improvements, and by providing first-time home buyer assistance. |
|---------|---|

|                     |  |
|---------------------|--|
| Objective:          | To promote or facilitate the development and rehabilitation of affordable housing in Contra Costa County. To provide partial funding for an average of 15 new affordable units annually with a priority on family housing.   |
| Responsible Dept.:  | Community Development Department   |
| Financing:          | Existing County staff time, HUD funds (CDBG, HOME and other programs). County received an allocation of \$1.6 million in HOME funds in FY 92-93 and anticipates a FY 93-94 allocation of \$1 million. The County annually receives \$3.4 million in CDBG funds in which a minimum of 50 percent is reserved for housing purposes.  |
| Time Frame:         | In connection with funding cycles  |
| <b>Program 2.2:</b> | <b>Funding for Housing Trust Fund</b>  |
| Action:             | Convene Housing Trust Fund Task Force to consider revenue-generating options for affordable housing. Evaluate recommendations for inclusionary zoning ordinance and in-lieu fee and issuance of general obligation bond.   |
| Objective:          | To generate ongoing source of revenue for Housing Trust Fund, which will be utilized to increase the availability of affordable housing in the County.   |
| Responsible Dept.:  | County and City Task Force, Board of Supervisors   |
| Financing:          | Several options under consideration  |
| Timeframe:          | Housing Trust Fund initially funded with \$2.5 million from refunding of tax exempt bonds. Housing Trust Fund Task Force created in 1991. Summary report and recommendations prepared in June 1992. Consider adoption of inclusionary zoning/in-lieu fee and evaluate feasibility of general obligation bond, and addition to landfill tipping fee for housing by end of 1993.   |
| <b>Program 2.3:</b> | <b>Non-Profit and Affordable Housing Developer Outreach</b>  |
| Action:             | Meet with local non-profit and private developers to promote the affordable housing programs outlined in the Housing Element. Provide interested developers with the inventory of vacant sites, and explain procedures for utilizing the programs. Further, allocate minimum of 15 percent of HOME funds (\$240,000 for 1992-1993) to community housing development organizations. Develop standards for the issuance of 501(c)(3) non-profit bonds. |
| Objective:          | To enhance the County's role in facilitating the development of affordable housing by nonprofit developers.  |
| Responsible Dept.:  | Community Development Department   |
| Financing:          | Community Development Block Grant, HOME funds.   |



**Time Frame:** Ongoing. Tax exempt bonds issued 1990.

**Program 2.4: Fee and Permit Waiver**

**Action:** Discretionary waiving of all or a portion of planning fees for nonprofit developers of projects affordable to very-low and low-income households.

**Objective:** To encourage the development of affordable housing and support an average of two affordable developments per planning period.

**Responsible Dept.:** Community Development Department

**Financing:** County of Contra Costa

**Time Frame:** Ongoing. Fees waived and fast tracking for 50-unit senior project in 1992.

**Program 2.5: Mortgage Credit Certificate Program (MCC)**

**Action:** Undertake County MCC Program to enhance the affordability of both new and existing homes for first-time low- to moderate-income home buyers. Implement lender training program and widely publicize program in local newspapers.

**Objective:** To educate lenders and prospective purchasers about the program with a goal of allocating 15 MCCs to unincorporated Contra Costa County home buyers annually.

**Responsible Dept.:** Community Development Department

**Financing:** MCC application fees

**Time Frame:** Ongoing. Training program initiated in 1991, with first MCCs issued October 1991.

**Program 2.6: Density Bonus**

**Action:** Promote the utilization of the County's density bonus policy. The ordinance specifies that a developer shall be granted a bonus of at least 25 percent, and an additional incentive, for the provision of 20 percent of the units for lower-income households, or 10 percent for very low-income households, or 50 percent of the units for senior citizens.

**Objective:** To provide incentives for the development of affordable housing.

**Responsible Dept.:** Community Development Department

**Financing:** None required

**Time Frame:** Ongoing

|                          |   |
|--------------------------|---|
| <b>Program 2.7:</b>      | <b>Consider Refunding Tax Exempt Bonds to Extend Period of Affordability</b>  |
| Action:                  | Undertake an evaluation of refunding County tax exempt bond issues to extend the period of affordability.   |
| Objective:               | Prolong affordability on bond-financed projects.  |
| Responsible Dept.:       | Community Development Department  |
| Financing:               | Housing Program Administration funds  |
| Time Frame:              | Complete evaluation and undertake feasible refundings by end of 1993.   |
| <br><b>Program 2.8:</b>  | <br><b>Condominium Conversion</b>   |
| Action:                  | Enforce the existing condominium conversion ordinance.  |
| Objective:               | Preserve the existing stock of rental units and mitigate impacts, by enforcing the restrictive conversion ordinance.  |
| Responsible Dept.:       | Community Development Department  |
| Financing:               | None required   |
| Time Frame:              | Ongoing   |
| <br><b>Program 2.9:</b>  | <br><b>Ensure the Continuing Affordability of Subsidized Projects</b>   |
| Action:                  | Monitor actions by the State and Congress regarding appropriations for extensions of Section 8 contracts and termination of mortgage use restrictions for preservation. Maintain regular communications with property owners and nonprofits with potential to acquire projects. |
| Objective:               | Preserve the 56 affordable units at Creekside Terrace and 49 affordable units at Rivershore Apartments as affordable to very-low and low-income households.   |
| Responsible Dept.:       | Community Development Department  |
| Financing:               | If buildings are subject to conversion, contribute CDBG, HOME funds, Housing Trust Fund and/or tax increment revenues to ensure their continued affordability. Facilitate the use of federal and/or state funds to further the effort.  |
| Time Frame:              | Ongoing   |
| <br><b>Program 2.10:</b> | <br><b>Facilitate the Development of Affordable Housing on Surplus Public Sites</b>   |
| Action:                  | Support the development of affordable single-family and multifamily units on surplus county-owned sites. Provide land use/development information to developers.  |

Objective: To increase the potential supply of sites targeted for affordable housing. Develop 211 units on County Redevelopment Agency-owned site adjacent to Pleasant Hill BART station with at least 15 percent affordable units.

Responsible Dept.: Community Development Department/Redevelopment Agency

Financing: Staff time

Time Frame: Redevelopment Agency assembled site in 1992. Ongoing.

**Program 2.11: First-Time Home buyers Program**

Action: Utilize \$200,000 in HOME funds from 1992-1993 application for first-time home buyers program for low and moderate-income households. Issue single-family bonds and Mortgage Credit Certificates (MCCs). Establish an equity sharing first-time home buyer program.

Objective: To increase access to homeownership for lower-income households.

Responsible Dept.: Community Development Department

Financing: Federal funds, tax exempt bonds and redevelopment funds.

Time Frame: 1992 bond issue anticipated to support buyers of 150 units, of which 30 would be in the unincorporated County. Additional applications for HOME funds to be submitted as funding is available. Equity sharing program to be established in 1993 in selected redevelopment project areas.

**Program 2.12: Negotiate Affordable Housing as Part of Development Agreements**

Action: Large-scale residential projects requesting a Vesting Development Agreement should provide a minimum of 25 percent of the units for moderate income households, or 10 percent for low income. If revisions to existing development agreement are sought, specify that a portion of the units be reserved for very-low and low-income housing or a contribution be made to the County's Housing Trust Fund. Negotiate comparable affordable housing component with other Development Agreements.

Objective: To increase the supply of affordable housing and to encourage the development of mixed-income housing.

Responsible Dept.: Community Development Department, County Counsel

Financing: None required

Time Frame: Ongoing



**Program 2.13: Evaluate Mechanisms for Optimizing the County's Fee Structure**

**Action:** Retain consultant to evaluate planning fee structure to assure that those costs associated with processing development applications are reflected in the fees assessed.

**Objective:** To rationalize the development and application fee structure, and assure that costs attributable to these functions are provided for.

**Responsible Dept.:** GMEDA

**Financing:** General Fund

**Time Frame:** Study completed in 1992. Consider modification of fees in 1993.

**Program 2.14: Solicit Affordable Housing Contributions from High-End Residential Developers**

**Action:** Achieve an average of \$1,000 per unit contribution to the County's Housing Trust Fund for high-end residential projects (priced over \$350,000 per unit).

**Objective:** To increase local funding for affordable housing.

**Responsible Dept.:** Board of Supervisors, Community Development Department

**Financing:** None required

**Time Frame:** Ongoing

**GOAL 3: HOUSING CONSERVATION AND REHABILITATION**

TO PROMOTE ADEQUATE MAINTENANCE AND, WHERE NEEDED, THE IMPROVEMENT OF THE COUNTY'S HOUSING STOCK AND CONSERVE AFFORDABLE HOUSING.

Policy 3.1: Rehabilitation goals to improve existing housing and preserve neighborhood quality. Conservation goals for affordable units at risk of conversion to market rate. Section 8 vouchers and certificates and 250 units occupied by very-low and low-income households in need of minor weatherization improvements.

**UNINCORPORATED CONTRA COSTA COUNTY QUANTIFIED OBJECTIVE  
FOR REHABILITATION AND CONSERVATION**

|                                  | <b>Total</b> | <b>Very Low<br/>Income</b> | <b>Low<br/>Income</b> | <b>Moderate<br/>Income</b> | <b>Above Moderate<br/>Income</b> |
|----------------------------------|--------------|----------------------------|-----------------------|----------------------------|----------------------------------|
| Rehabilitation Goal<br>1990-1995 | 250          | 174                        | 26                    | 0                          | 0                                |
| Conservation Goal<br>1990-1995   | 1,155        | 866                        | 289                   | 0                          | 0                                |

**Program 3.1: Owner-Occupied Rehabilitation Program**

**Action:** Market County Housing Rehabilitation Program. This program is designed to assist low- or very-low income homeowners in rehabilitating their residences. Eligible applicants receive low-interest and zero interest loans for up to 20 years.

**Objective:** To assist an average of 20 lower-income owners annually in rehabilitating their homes.

**Responsible Dept.:** Community Development Department

**Financing:** HUD; CDBG and HOME funds; state funds; Redevelopment set-aside and program income

**Time Frame:** Ongoing

**Program 3.2: Rental Rehabilitation Program**

**Action:** Continue to utilize CDBG funds for rental rehab. Utilize 50 percent of HOME funds for the acquisition and rehabilitation of multifamily rental units for very-low and low-income households.

**Objective:** To increase the maintenance of the County's lower-income rental housing stock, upgrade 30 residential units annually, or 150 over the planning period, affordable to very-low and low-income renters.

**Responsible Dept.:** Community Development Department

**Financing:** HUD; CDBG and HOME funds; Redevelopment set-aside and program income

**Time Frame:** Ongoing

**Program 3.3: Evaluate and Improve the County-Sponsored Rehabilitation Programs**

**Action:** Retain consultant to evaluate the effectiveness and efficiencies of the owner-occupied and rental rehabilitation programs and implement recommended program improvements.

**Objective:** To optimize the delivery of rehabilitation services for affordable housing.

Responsible Dept.: Community Development Department  
 Financing: CDBG funds for consultant  
 Timeframe: Consultant retained and preliminary report prepared in 1992. Recommendations anticipated in early 1993, with implementation of appropriate recommendations in 1993.

**Program 3.4: Rehabilitation Program Promotional Campaign**

Action: Develop and implement publicity campaign to inform owners about the availability of low-interest rehabilitation loans.

Objective: To develop and distribute brochures about the County program and to send informational letters to homeowners associations and other groups.

Responsible Dept.: Building and Planning Department

Financing: HUD; HOME funds

Time Frame: Implement campaign May through August, annually commencing 1993

Policy 3.2: Energy Conservation

The County shall promote energy conservation by encouraging the use of solar design systems, retrofitting of existing homes, and clustering residential development.

**Program 3.5: Weatherization Program**

Action: Provide education on energy conservation, minor weatherization improvements and utility payment assistance to lower-income households.

Objective: To reduce housing costs to 50 homeowners annually by assisting seniors and income-eligible households with conserving their units.

Responsible Dept.: County Community Services Department, PG&E

Time Frame: Ongoing

**GOAL 4: SPECIAL HOUSING NEEDS**

TO ADDRESS THE HOUSING NEEDS OF SENIOR CITIZENS, PHYSICALLY DISABLED, HOMELESS, LARGE FAMILIES, FARMWORKERS AND FEMALE-HEADED HOUSEHOLDS



- Program 4.1: Enforce Uniform Building Code Handicapped Access Provisions**
- Action: Require that all new multifamily developments comply with handicapped provisions included in the UBC.
- Objective: To provide handicapped access to new housing developments.
- Responsible Dept.: Building Inspection Department
- Financing: None required
- Time Frame: Ongoing
- 
- Program 4.2: Design Flexibility for Elderly Projects**
- Action: Allow techniques such as smaller units sizes, parking reduction, common dining facilities and fewer required amenities for senior projects.
- Objective: To encourage the development and expansion of housing opportunities for the elderly.
- Responsible Dept.: Community Development and Building Inspection Departments
- Financing: Staff time
- Time Frame: Ongoing
- 
- Program 4.3: Encourage the Development of Family Housing**
- Action: Expedite approvals for affordable housing for larger family households.
- Objective: To increase housing options for families with children, particularly those developed for female-headed households.
- Responsible Dept.: Community Development Department
- Financing: None required
- Time Frame: Ongoing
- 
- Program 4.4: Shelter for the Homeless**
- Action: Allow housing for the homeless in designated areas of the County with a Use Permit.
- Objective: To accommodate developer proposal for housing the homeless.
- Responsible Dept.: Community Development Department
- Financing: Staff time
- Time Frame: Ongoing
- 
- Program 4.5: Seek Funding for Additional Homeless Shelters**
- Action: Seek funding for new site for emergency housing in central County. Obtain funds for 100 beds by 1995.
- Objective: To increase housing opportunities for the homeless.

Responsible Dept.: Community Development Department, County Housing Authority  
 Financing: Apply for Emergency Shelter Grants (ESG), Supportive Housing Demonstration Program funds, Community Development Block Grant, and other programs to support housing for the homeless.  
 Time Frame: Ongoing

**Program 4.6: Increase the Development of Farmworker Housing**

Action: Pursue allowing agriculturally related structures on agriculturally zoned land without a use permit to promote on-site farmworker housing.

Objective: To increase the supply and affordability of farmworker housing.

Responsible Dept.: Community Development Department

Financing: Staff time

Time Frame: Adopt new regulations by end of 1993

**Program 4.7: Home Sharing**

Action: Provide financial support to nonprofit organizations assisting low- and moderate-income seniors, disabled and other residents in finding affordable housing through homesharing.

Objective: To provide for the ability of lower-income homeowners to maintain their homes and to provide additional housing options for renters.

Responsible Dept.: Community Development Department

Financing: CDBG funds

Time Frame: Ongoing.

**GOAL 5: REDEVELOPMENT**

TO ADHERE TO OR EXCEED THE HOUSING REQUIREMENTS OF THE STATE REDEVELOPMENT LAW.

**Policy 5.1: Replacement Housing**

The County, through the Redevelopment Agency, shall make available suitable replacement housing at affordable prices to households displaced by actions of the County or its Redevelopment Agency.

**Program 5.1: Replacement Housing**

Action: Within four years of the removal of low- and moderate-income housing units in the Redevelopment Area, the Agency will provide corresponding replacement housing. Where economically and physically feasible, provide

replacement housing prior to the demolition of existing units. Where replacement units occur after demolition, provide a rental subsidy to displaced residents.

Objective: To minimize the impact on existing residents and ensure the replacement of lost units at the same affordability levels.

Responsible Dept.: Redevelopment Agency

Financing: Tax increment funds, developer assistance, possible contribution of County land and other local, state and federal sources of funding.

Time Frame: Ongoing, project related

**Program 5.2: Require Affordable Housing within Pleasant Hill BART Station Redevelopment Area**

Action: Require a minimum of 15 percent affordable housing for any residential project developed within the Pleasant Hill BART Station Redevelopment Area, with a minimum of six percent of all units affordable to very-low income households.

Objective: To increase the supply of affordable housing and meet the requirements of Redevelopment Law on a project-by-project basis. Redevelopment Law requires that 15 percent of all units developed or rehabbed in a Redevelopment Project Area must be affordable.

Responsible Dept.: Community Development Department, Redevelopment Agency

Financing: None required

Time Frame: Ongoing. Achieved 20 percent affordable units at the 892-unit Park Regency project through use of mortgage revenue bonds.

**Program 5.3: Housing Set-Aside Fund**

Action: Target a minimum of the 20 percent Housing Set-Aside funds to be derived from tax increment to very-low, low and moderate-income housing.

Objective: To provide economic support to the development of 220 units at affordable levels.

Responsible Dept.: Redevelopment Agency

Financing: Tax increment funds

Time Frame: 1994



**GOAL 6: FAIR HOUSING**

TO ENSURE DECENT, SAFE LIVING ENVIRONMENTS FOR THE COUNTY'S RESIDENTS REGARDLESS OF AGE, SEX, FAMILY COMPOSITION, RACE, ETHNICITY, RELIGION, PHYSICAL OR MENTAL DISABILITY, OR INCOME.

**Policy 5: The County shall support private and public efforts to ensure non-discrimination in the sale or rental of housing.**

|                     |   |
|---------------------|---|
| <b>Program 6.1:</b> | <b>Support Local Non-Profit Anti-Discrimination Programs</b>  |
| Action:             | Adopt the CDBG Residential Displacement Program. Provide CDBG funding to nonprofit organizations providing fair housing counseling. |
| Objective:          | To support efforts to ensure non-discrimination in housing.   |
| Responsible Dept.:  | Community Development Department  |
| Financing:          | CDBG  |
| Time Frame:         | Ongoing   |

**GOAL 7: HOUSING ELEMENT IMPLEMENTATION**

TO ENSURE THE IMPLEMENTATION OF ALL HOUSING POLICIES AND TO PROMOTE BROAD PARTICIPATION IN THE PROGRAMS.

**Policy 7: Implementation and Revision**

On a regular basis, the County shall review its ordinances and programs regulating residential uses and construction to ensure consistency with the General Plan and to identify and correct any provisions that unnecessarily increase the cost of housing, extend the time required for processing applications or preclude provision of housing to meet special needs.

|                     |   |
|---------------------|---|
| <b>Program 7.1:</b> | <b>Citizen Participation</b>  |
| Action:             | Hold public meetings to receive public input and to inform residents and developers about the housing needs, resources and program options. |
| Objective:          | To disseminate information about housing programs and encourage public participation.   |
| Responsible Dept.:  | Community Development Department  |
| Financing:          | None required   |
| Time Frame:         | Upon any substantive revision to the Housing Element  |

**Program 7.2: Record Keeping**

**Action:** Develop a record-keeping system to collect statistics relating to the objectives and programs of the Housing Element.

**Objective:** To maintain a system for evaluating the progress and achievements of the housing program.

**Responsible Dept.:** Minimal staff time.

**Financing:** Community Development Department, Building Inspection Department and Redevelopment Agency

**Time Frame:** Ongoing

**CONTRA COSTA COUNTY PLANNING DEPARTMENT  
SUMMARY OF ZONING REGULATIONS**

| Chapter Number | Zoning Symbol | Zoning District           | MINIMUM STANDARDS |       |       |       |                  |      | MAXIMUM STANDARDS |                   |
|----------------|---------------|---------------------------|-------------------|-------|-------|-------|------------------|------|-------------------|-------------------|
|                |               |                           | Lots              |       |       | Yards |                  |      | Building Height   | Building Coverage |
|                |               |                           | Area              | Width | Depth | Front | Side             | Rear |                   |                   |
| 84-4           | R-6           | Single Family Residential | 6,000 sq ft       | 60'   | 90'   | 20'   | 5'<br>Total 15'  | 15'  | 35'<br>2½ story   | —                 |
| 84-6           | R-7           | Single Family Residential | 7,000 sq ft       | 70'   | 90'   | 20'   | 5'<br>Total 15'  | 15'  | 35'<br>2½ story   | —                 |
| 84-8           | R-10          | Single Family Residential | 10,000 sq ft      | 80'   | 90'   | 20'   | 10'<br>Total 20' | 15'  | 35'<br>2½ story   | —                 |
| 84-10          | R-12          | Single Family Residential | 12,000 sq ft      | 100'  | 100'  | 20'   | 10'<br>Total 25' | 15'  | 35'<br>2½ story   | —                 |
| 84-12          | R-15          | Single Family Residential | 15,000 sq ft      | 100'  | 100'  | 20'   | 10'<br>Total 25' | 15'  | 35'<br>2½ story   | —                 |
| 84-14          | R-20          | Single Family Residential | 20,000 sq ft      | 120'  | 120'  | 25'   | 15'<br>Total 35' | 15'  | 35'<br>2½ story   | —                 |
| 84-16          | R-40          | Single Family Residential | 40,000 sq ft      | 140'  | 140'  | 25'   | 20'<br>Total 40' | 15'  | 35'<br>2½ story   | —                 |
| 84-18          | R-65          | Single Family Residential | 65,000 sq ft      | 140'  | 140'  | 25'   | 20'<br>Total 40' | 15'  | 35'<br>2½ story   | —                 |
| 84-20          | R-100         | Single Family Residential | 100,000 sq ft     | 200'  | 200'  | 30'   | 30'<br>Total 60' | 30'  | 35'<br>2½ story   | —                 |

Consult the Contra Costa County Planning Department for clarification and additional regulations.



| Chapter Number | Zoning Symbol | Zoning District        | MINIMUM STANDARDS |       |       |       |                   |      | MAXIMUM STANDARDS  |                   |
|----------------|---------------|------------------------|-------------------|-------|-------|-------|-------------------|------|--------------------|-------------------|
|                |               |                        | Lots              |       |       | Yards |                   |      | Building Height    | Building Coverage |
|                |               |                        | Area              | Width | Depth | Front | Side              | Rear |                    |                   |
| 84-22          | D-1           | Two-Family Residential | 8,000 sq ft       | 80'   | 90'   | 20'   | 10'<br>Total 20'  | 15'  | 35'<br>2½ story    | —                 |
| 84-32          | F-R           | Forestry Recreational  | 21,780 sq ft      | 80'   | —     | 25'   | 15'<br>Total 35'  | 15'  | 50'<br>4 story     | —                 |
| 84-34          | F-1           | Water Recreational     | 6,000 sq ft       | 60'   | 90'   | 20'   | 5'<br>Total 15'   | 15'  | 35'<br>2½ story    | —                 |
| 84-36          | A-1           | Light Agriculture      | 21,780 sq ft      | 120'  | 120'  | 25'   | 15'<br>Total 35'  | 15'  | 35'<br>2½ story    | —                 |
| 84-38          | A-2           | General Agriculture    | 5 acres           | 250'  | 200'  | 25'   | 20'<br>Total 40'  | 15'  | 35' or<br>2½ story | —                 |
| 84-40          | A-3           | Heavy Agriculture      | 10 acres          | 140'  | —     | 25'   | 25'<br>Total 50'  | 25'  | —                  | —                 |
| 84-42          | A-4           | Agricultural Preserve  | 20 acres          | 300'  | 300'  | 50'   | 50'<br>Total 100' | 25'  | —                  | —                 |
| 84-80          | A-20          | Exclusive Agricultural | 20 Acres          | 250'  | 300'  | 25'   | 50'<br>Total 100' | --   | 35'<br>2½ Story    | ---               |
| 84-82          | A-40          | Exclusive Agricultural | 40 Acres          | 250'  | 300'  | 25'   | 50'<br>Total 100' | --   | 35'<br>2½ Story    | ---               |
| 84-84          | A-80          | Exclusive Agricultural | 80 Acres          | 250'  | 300'  | 25'   | 50'<br>Total 100' | --   | 35'<br>2½ Story    | ---               |
| 84-44          | O-1           | Limited Offices        | 15,000 sq ft      | 100'  | 90'   | 20'   | 5'<br>Total 15'   | 15'  | 35'<br>2½ Story    | 35%               |

| Chapter Number | Zoning Symbol | Zoning District               | MINIMUM STANDARDS |                                      |       |       |                                 |      | MAXIMUM STANDARDS |                   |
|----------------|---------------|-------------------------------|-------------------|--------------------------------------|-------|-------|---------------------------------|------|-------------------|-------------------|
|                |               |                               | Lots              |                                      |       | Yards |                                 |      | Building Height   | Building Coverage |
|                |               |                               | Area              | Width                                | Depth | Front | Side                            | Rear |                   |                   |
| 84-50          | N-B           | Neighborhood Business         | 3,500 sq ft       | 35'                                  | —     | 25'   | —                               | —    | 50'               | —                 |
| 84-50          | Planned N-B   | Planned Neighborhood Business | 3,500 sq ft       | 35'                                  | —     | 25'   | —                               | —    | 30' 2 story       | 25%               |
| 84-52          | R-B           | Retail Business               | 3,500 sq ft       | 35'                                  | —     | 10'   | —                               | —    | 50'               | —                 |
| 84-52          | Special R-B   | Special Retail Business       | 20 acres          | —                                    | —     | 10'   | —                               | —    | —                 | —                 |
| 84-54          | C-1           | General Commercial            | 7,500 sq ft       | —                                    | —     | 10'   | Total 10'                       | 20'  | 50'               | —                 |
| 84-56          | C-M           | Controlled Manufacturing      | 40,000 sq ft      | 120'                                 | —     | 50'   | 20' Total 40'                   | 20'  | 35' 2 story       | 30%               |
| 84-58          | L-I           | Light Industrial              | 7,500 sq ft       | —                                    | —     | 10'   | 10' Total 20'                   | —    | 3 story           | —                 |
| 84-60          | W-3           | Controlled Heavy Industrial   | —                 | —                                    | —     | 10'   | Subject to 250 foot Buffer Area |      | —                 | —                 |
| 84-62          | H-I           | Heavy Industrial              | —                 | —                                    | —     | 10'   | —                               | —    | —                 | —                 |
| 84-64          | U             | Unrestricted                  | —                 | —                                    | —     | 10'   | —                               | —    | —                 | —                 |
| 84-66          | P-1           | Planned Unit Development      | 15/25/50 acres    | Subject to Development Plan Approval |       |       |                                 |      |                   |                   |
| 84-68          | T-1           | Mobile Home Park              | 3 acres           | —                                    | —     | 20'   | 10' Total 20'                   | 10'  | —                 | —                 |

# CONTRA COSTA COUNTY PLANNING DEPARTMENT

## SUMMARY OF ZONING REGULATIONS

| Chapter Number           | Zoning Symbol | Zoning District             | MINIMUM STANDARDS |       |                  |       |                  |      |   |                                      | MAXIMUM STANDARDS   |                   |
|--------------------------|---------------|-----------------------------|-------------------|-------|------------------|-------|------------------|------|---|--------------------------------------|---|-------------------|
|                          |               |                             | Lots              |       |                  | Yards |                  |      | Parking Spaces  | Land Per Unit                        | Building Height   | Building Coverage |
|                          |               |                             | Area              | Width | Depth            | Front | Side             | Rear |   |                                      |   |                   |
| 84-28                    | M-29          | Multiple Family Residential |                   |       |                  |       |                  |      |   |                                      |   |                   |
|                          |               | Type of Unit:               |                   |       |                  |       |                  |      |   |                                      |   |                   |
|                          |               | Detached Single Residence   | 6,000 sq ft       | —     | —                | 25'   | 20'<br>Total 40' | 20'  | Studio Unit:<br>1/Unit<br>1 Bedroom:<br>1½/Unit<br>2 or More Bedrooms:<br>2/unit + ½ space/unit for guest parking | 1,500 sq ft<br>Max Units:<br>29/Acre | 30 feet.<br>When abutting single fam. residential district - Buildings w/in 50' of that district shall not exceed 20' | 35%               |
|                          |               | Duplex                      | 8,000 sq ft       | —     | —                | 25'   | 20'<br>Total 40' | 20'  |   |                                      |   |                   |
| Multiple Family Dwelling | 10,000 sq ft  | —                           | —                 | 25'   | 20'<br>Total 40' | 20'   |                  |      |   |                                      |   |                   |
| 84-28                    | M-17          | Same As Above               |                   |       |                  |       |                  |      |   | 2,500 sq ft<br>Max Units:<br>17/Acre |   |                   |
| 84-29                    | M-12          | Same As Above               |                   |       |                  |       |                  |      |   | 3,600 sq ft<br>Max Units:<br>12/acre | Same As Above   | 25%               |
| 84-30                    | M-9           | Same As Above               |                   |       |                  |       |                  |      |   | 4,800 sq ft<br>Max Units:<br>9/acre  | Same As Above   | 25%               |
| 84-31                    | M-6           | Same As Above               |                   |       |                  |       |                  |      |   | 7,200 sq ft<br>Max Units:<br>6/acre  | Same As Above   | 25%               |



| Chapter<br>Number | Zoning<br>Symbol | Zoning District            | MINIMUM STANDARDS |       |       |       |   |      | MAXIMUM STANDARDS  |                      |
|-------------------|------------------|----------------------------|-------------------|-------|-------|-------|---|------|--------------------|----------------------|
|                   |                  |                            | Lots              |       |       | Yards |   |      | Building<br>Height | Building<br>Coverage |
|                   |                  |                            | Area              | Width | Depth | Front | Side                                    | Rear |                    |                      |
| 84-46             | A-0              | Administrative<br>Offices  | 5<br>Acres        | 350'  | 400'  | 75'   | 50'<br>Total 100'                       | 50'  | 35'                | 25%                  |
| 84-48             | G-1              | Interchange<br>Transitinal | 10,000<br>sq ft   | 100'  | ---   | 20'   | 5'<br>Total 15'                         | 15'  | 25'                | 35%                  |
| 84-49             | C-B              | Community<br>Business      | 5,000<br>sq ft    | 50'   | 90'   | 10'   | 10' abutting<br>residential<br>district | ---  | 35'                | ----                 |
|                   |                  |                            |                   |       |       |       |   |      |                    |                      |
|                   |                  |                            |                   |       |       |       |   |      |                    |                      |
|                   |                  |                            |                   |       |       |       |   |      |                    |                      |
|                   |                  |                            |                   |       |       |       |   |      |                    |                      |
|                   |                  |                            |                   |       |       |       |   |      |                    |                      |
|                   |                  |                            |                   |       |       |       |   |      |                    |                      |
|                   |                  |                            |                   |       |       |       |   |      |                    |                      |
|                   |                  |                            |                   |       |       |       |   |      |                    |                      |
|                   |                  |                            |                   |       |       |       |   |      |                    |                      |
|                   |                  |                            |                   |       |       |       |   |      |                    |                      |







## 7. PUBLIC FACILITIES/SERVICES ELEMENT

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## **7. PUBLIC FACILITIES/SERVICES ELEMENT**

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### **7.1 INTRODUCTION**

This Public Facilities/Services Element establishes goals and policies that address the vital infrastructure and public services that must be provided to maintain the quality of life of existing and future Contra Costa County residents.

#### **LEGAL AUTHORITY**

The State General Plan Law (Government Code Section 65303) specifies the elements that must be included in County and City general plans. However, local governments may adopt any other elements or address any other subjects which relate to the physical development of the county or city. Thus, though not required by law, the inclusion of this Public Facilities and Services Element is optional. Once an optional element is adopted, it carries the same importance as the required elements and must be internally consistent with the other elements of the Plan.

### **7.2 RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS**

The Public Facilities/Services Element is most closely related to the Land Use, Growth Management and the Transportation and Circulation Elements, since it supports the goals and policies of those elements related to growth management and the coordination of land use, circulation and public facilities. Consistency with the growth management program is intended to incorporate the requirements set forth in Measure C-1988 as discussed in the Growth Management Element. Under the Growth Management Element, in addition to traffic level of service standards applicable to new growth, performance standards must be maintained through capital improvement projects, for the following items, based on local criteria: fire, police, parks, sanitary facilities, water, and flood control. This program provides the basis for policies which have been adopted for this element. The voters in Measure C - 1990 reaffirmed that growth management should be applicable to provide assurances that these public facilities will be able to be maintained at various performance standards. Measure C - 1990 is discussed in the Land Use Element and throughout this General Plan. This measure, which



establishes a 65/35 Land Preservation Standard for nonurban and urban development, respectively, provides that nonurban uses will include "facilities for public purposes, whether privately or publicly funded or operated, which are necessary or desirable for the public health, safety, or welfare or by state or federal law. . ." (See text in Section 1.10) As a result, the public facility goals, policies and implementation measures are correlated with the Land Use Element.

Consistency with the Safety Element is achieved through goals and policies which afford protection related to police and fire service, threats from flooding, avoidance of health hazards associated with inadequate provision of potable water and sanitary sewer facilities, and the management of hazardous materials. Consistency with the Housing Element is achieved through the provision of infrastructure supporting the shelter role of housing. Consistency with the Open Space and Conservation Elements is guaranteed through the policies related to premature extension of infrastructure and public services.

### **7.3 RELATIONSHIP TO OTHER GENERAL PLAN DOCUMENTS**

The goals, policies and implementation measures contained in this element are intended to guide planning for public and private projects that are subject to either approval of the County Planning Agency or to review by County staff, although they may be under the jurisdiction of other public agencies operating in the County. Such goals, policies and implementation measures are further intended to be in accordance with the other elements of the General Plan, as well as with other planning documents, including the County Hazardous Waste Management Plan (1988).

### **7.4 ORGANIZATION OF PUBLIC FACILITIES/SERVICES ELEMENT**

The Public Facilities/Services Element is organized into functional sections which address the following issues:

- o financing improvements and public services;
- o water service;
- o sewer service;
- o drainage and flood control;
- o public protection;
- o fire protection;
- o solid waste management;
- o hazardous waste management;

- o parks and recreation facilities;
- o schools and childcare; and
- o other public facilities.

Each section is divided into subsections that include an introduction with background information, mapping of facilities or services (if applicable), goals, policies and a listing of implementation measures.

## **7.5 FINANCING IMPROVEMENTS AND PUBLIC SERVICES**

### **INTRODUCTION**

The issue of financing capital improvements and funding ongoing public services relates to other elements of the General Plan in a number of ways:

- o The Land Use Element map defines the extent of urban growth and development throughout the County. The designation of urban land use will create a proportional need for additional facilities and services.
- o As the basic policy document regulating growth and development, the General Plan contains service standards that establish linkage between new development accommodated in the Plan and the quantity of new facilities and/or services required to meet demands created by the new development.
- o The General Plan also contains specific reference to actual improvements that will require funding and financing, most notably the County's transportation system network.
- o The General Plan provides an overall framework for programs which implement specific recommended policies, including a variety of programs involving funding services and financing.

This section of the Public Facilities/Services Element includes goals, policies, and implementation measures which address how needed facilities and services will be financed. The subject of financing capital improvements and public services within Contra Costa County is complex, given the large number of local jurisdictions involved. Municipal services are provided by 18 cities as well as a large number of special districts and county service areas which provide utilities, fire protection, parks and recreation, and other services.

At present, Contra Costa County must fund a variety of county-wide programs including social services and welfare, health services, and criminal justice. These functions dominate the County's budget. The County must also provide municipal services to urbanized unincorporated areas. As such, the County operates at a number of levels, providing its mandated county-wide services, providing public services to the unincorporated areas, and also serving as a coordinating agency, linking the activities of State agencies, the cities, the County, and the regional special districts.

As urban growth occurs in unincorporated areas, such as those areas that are established by this General Plan, demands for public services will continue to increase. The County does not have an adequate general revenue base to pay for typical public services standards in these areas. Demands for county-wide social and welfare services, health services, and criminal justice have also grown substantially, due to demographic changes, growth, and cost inflation. To allow major areas of new development will require special financing mechanisms, such as the establishment of Mello Roos districts, etc.

While public and county-wide service demands have been growing in the County, State and Federal support for infrastructure improvements has diminished or disappeared entirely. Major grant programs for sewer and water improvements and highway construction have all but been eliminated. Additionally, State and Federal funding for mandated human and social services programs have been cut back. Federal Revenue Sharing, once a major source of County funding for discretionary purposes, has also been discontinued. Article XIII A of the State Constitution (Proposition 13, passed by the voters in 1978), in addition to other more recent legislation, has further constrained the ability of County governments to raise public revenue.

To assure adequate financing of public services and facilities for current and future goals of the General Plan, the following goals, policies and implementation procedures have been developed.

## GOALS

- 7-A. To give a high priority to funding quality civic, public, and community facilities which serve a broad range of needs throughout the County.
- 7-B. To permit development in unincorporated areas only when financing mechanisms are in place or committed which assure that adopted performance standards in the growth management program will be met.
- 7-C. To utilize equitable financing methods which assure that adopted performance standards are achieved.
- 7-D. To cooperate with other local jurisdictions to promote the most cost effective methods of providing public facilities necessary for supporting the economic, social, and environmental well being of the County and its residents.
- 7-E. To resolve conflicts with other jurisdictions regarding the location of revenue generating land uses.

## POLICIES

- 7-1. New development shall be required to pay its fair share of the cost of all existing public facilities it utilizes, based upon the demand for these facilities which can be attributed to new development.



- 7-2. New development, not existing residents, should be required to pay all costs of upgrading existing public facilities or constructing new facilities which are exclusively needed to serve new development.
- 7-3. Broad-based funding sources for public facilities shall be sought which benefit both existing, new, and future residents of the County.
- 7-4. The financial impacts of new development or public facilities should generally be determined during the project review process and may be based on the analysis contemplated under the Growth Management Element or otherwise. As part of the project approval, specific findings shall be adopted which relate to the demand for new public facilities and how the demand affects the service standards included in the growth management program.
- 7-5. The County shall take an active role in coordinating major infrastructure construction within the County, particularly the transportation system network and extension of sewer and water service, to assure consistency of these improvements with the General Plan.
- 7-6. When adopting, amending, and imposing impact fees and developer exactions, the County shall consider the effects of such fees and exactions upon project economics, the County's development goals and housing needs.
- 7-7. The County shall develop and adopt a Capital Improvement Program which programs and prioritizes specific improvements to public facilities which are the responsibility of the County.
- 7-8. The County shall seek methods for cities to assume a greater share of the costs for county-wide services including social and welfare services, health services, and criminal justice.
- 7-9. The County shall establish and implement an equitable and standardized approach to property tax sharing with cities during the annexation process.
- 7-10. The County shall cooperate with cities during the establishment of redevelopment projects to assure that fiscal impacts upon the County are minimized.
- 7-11. A comprehensive financing plan which assures that needed public facilities are adequately financed, shall be included in all new specific plans adopted by the County.
- 7-12. The County shall attempt to cooperate with cities when processing applications for subdivisions or other large projects located within a city's Sphere of Influence.
- 7-13. The County shall stress financing strategies that maximize use of pay-as-you-go methods to gain the most benefit from available revenue.
- 7-14. The County shall recover all costs for administrative and technical services provided in the development review process through the use of fees and charges, whenever possible.
- 7-15. The County shall avoid using General Fund revenues for funding the incremental costs of new municipal services in developing areas.

## IMPLEMENTATION MEASURES

### Master Tax Sharing Agreement

- 7-a. Prepare and adopt a standard Master Tax Sharing Agreement for processing annexation applications. The agreement should be reviewed with cities to facilitate cooperation. Annexations and associated development activity subject to the agreement should be consistent with the County General Plan.

### Redevelopment Fiscal Review

- 7-b. Establish a multi-departmental team to review new redevelopment projects. Establish standard fiscal criteria for evaluating such projects and establishing fiscal detriment, if any. If such detriment is determined, negotiate with redevelopment agency to mitigate this detriment.

### Transportation Impact Fee

- 7-c. Review the Transportation Area of Benefit Fee Ordinance to assure consistency with AB 1600. Future ordinance amendments should assure that new development will fund a fair share of transportation improvements which are required to serve the new development.

### Intergovernmental Coordination

- 7-d. Maintain an effective liaison and improve cooperation with the cities and special districts serving the County, as part of an effort to maintain high quality services and implement the General Plan.
- 7-e. As part of the annual review of the Capital Improvement Program, include a review under Government Code Section 65401, listing all capital projects sponsored by other jurisdictions for the following year. Additionally, the County should make a finding relative to the consistency of projects with the County's General Plan reviewed under Government Code, Section 65402.
- 7-f. Comment on any proposed capital improvements found inconsistent with the County's General Plan to the sponsoring agency.

### Capital Improvement Program

- 7-g. Prepare and adopt a Capital Improvement Program that compiles the capital improvements planned for construction over the next five year period by County agencies, including cost estimates, the phasing of specific improvements and associated costs, and methods with which specific improvements will be financed.

### Development Review/Plan Preparation Process

- 7-h. Amend the development review and plan preparation process to include consideration of project impacts upon public facilities, and proposed financing methods. Where negative fiscal impacts are

indicated, include specific mitigation measures as conditions of project approval, or carefully consider the appropriateness of approval, consistent with the facilities standards established in the Growth Management Element.

## 7.6 WATER SERVICE

### INTRODUCTION

Water service in Contra Costa County is provided either by special service districts or by nine municipalities. There are two major water providers in the County: the East Bay Municipal Utility District (EBMUD) and the Contra Costa Water District (CCWD). EBMUD delivers water directly to its customers after it is treated. CCWD provides treated water services to several cities in the Central County area and several city and other water agencies buy "raw," untreated water from CCWD, treat it, and then sell it to their own local customers. CCWD is not limited to providing domestic urban water supplies. Other services include wholesale treated water, reclaimed water, industrial, agricultural and landscaping irrigation water supplies.

EBMUD provides treated water to all of western Contra Costa County, the Lamorinda area, portions of Walnut Creek and Pleasant Hill, and all of the San Ramon Valley (see Figure 7-1). EBMUD is the largest water district in Northern California and serves 1.1 million customers in Alameda and Contra Costa County. The District brings water from the Mokelumne River watershed in the Sierra Nevada through three 81-mile aqueducts to the East Bay.

EBMUD has adopted a Water Supply Management Program which identifies the security, shortage and safety and health problems associated with its water supply. Concurrently, EBMUD began a comprehensive work program to update the Water Supply Management Program and to study possible water supply improvement projects to solve these projects. These proposed programs consider the needs of existing ultimate service boundary to the year 2020. It does not consider extension of water service outside the ultimate boundary.

The other major water supplier, CCWD, supplies treated water to all urbanized areas in Central Contra Costa County that are not serviced by EBMUD: the northern and eastern portion of Walnut Creek, most of Pleasant Hill, all of Concord and Clayton, the Hidden Lakes area of Martinez, and the unincorporated areas of Vine Hill, Pacheco, Clyde, Port Chicago, and along Marsh Creek Road to Morgan Territory (see Figure 7-1).

The CCWD treated water system consists of a San Joaquin Delta intake at Rock Slough, a river intake and pumping station at Mallard Slough near Bay Point, Mallard Reservoir north of Concord where raw Delta water is stored, and a modern water treatment plant near Mallard Reservoir. The CCWD wholesales raw water to



industry and several municipal water companies, including the cities of Antioch, Pittsburg, and Martinez. Other agencies which buy untreated water from CCWD are the Southern California Water Company (serving Bay Point) and the Oakley Water District.

The CCWD receives raw Delta water from Rock Slough east of Knightsen and transports it to customers in the East and Central County via the 48-mile Contra Costa Canal system. The CCWD receives most of its supply from two takeouts on the Canal. During the winter months of wet years it also uses Mallard Slough to augment its supply.

A major problem facing the Contra Costa Water District is the increasing salinity of its water supply. Because the utility takes water from the San Joaquin-Sacramento River Delta, the quality of the water varies drastically according to the seasonal volumes of freshwater flows through the area. During years of lower than average rain and snowfall, saltwater intrudes further inland, threatening the intake at Rock Slough. This condition is further exacerbated by the historic practice of diverting more and more water for agricultural purposes from the two inland rivers before they reach the Delta.

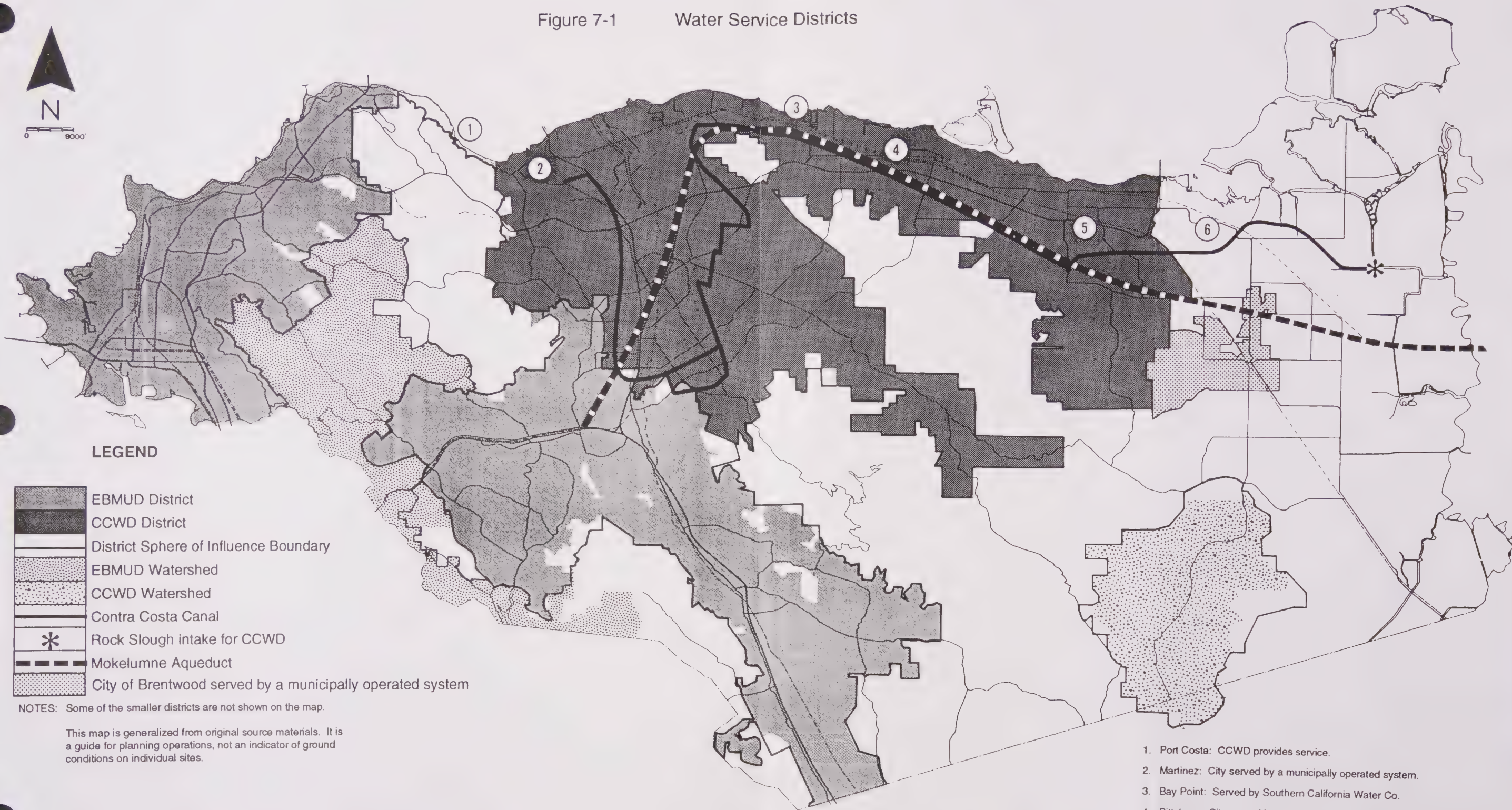
The only large CCWD reservoir used for emergency backup storage is Contra Loma, in the hills south of Antioch. The lack of local storage reservoirs is a major weakness of the District's facilities, which is intended to be rectified by construction of the planned Los Vaqueros Reservoir(s) in the southeastern portion of the County. In addition, the Los Vaqueros Reservoir(s) will be used to blend higher quality water with the salty summer flows of the Delta waters, thereby improving the water quality of the CCWD water supply.

The third source of water in Contra Costa County is groundwater supplies. Several small public and private water companies extract underground water through wells and convey it to nearby customers. Most of these are in East County areas such as Bethel Island, Knightsen, Byron, and Discovery Bay.

Periodic droughts experienced by the region have underlined the importance of water conservation efforts. Contra Costa is the only county in the region to have adopted specific water conservation regulations which apply to all new development in unincorporated areas. This measure requires new development to limit lawn areas and to install drought resistant landscaping, among other conditions of approval for development projects. For example, Brentwood is currently utilizing wells and has a long term water agreement with CCWD.



Figure 7-1 Water Service Districts







### Map of Planned Water Service Areas

The existing and planned service boundaries for the nine water service agencies in Contra Costa County are shown in Figure 7-1. State law requires the Local Agency Formation Commission (LAFCO) of each county to adopt "Sphere of Influence" boundaries which show the ultimate area that is expected to be served by each water agency. The existing service is then expanded as necessary to include projected growth areas within the adopted Sphere of Influence boundary.

There are only a few areas in the County which are planned for development but are not currently included within an existing water service or Sphere of Influence boundary. These areas should ultimately be annexed into an appropriate service district. Conversely, Figure 7-1 highlights those areas which are included within current water service boundaries or Sphere of Influence areas, but which are not planned for urban development under the provisions of this General Plan. According to the nine water agencies now serving the County, the General Plan projected population can be supported based on current water rights allocation; however, infrastructure would need to be constructed in order to serve the projected population.

Those areas not included in service areas are watershed and open space properties owned by the water districts or by the regional park district. These lands are designated by this plan to remain in agricultural and open space uses. Although district watershed lands are not planned to receive urban water service, due to tax reasons these lands will remain within the service district boundaries. However, the other areas not planned for urban development should generally be detached from the service districts if they are not providing service.

Much of the future growth in the County is planned within the Urban Limit Line area of the Pittsburg-Antioch area and other eastern areas and, to a lesser extent, the San Ramon Valley. The remainder of East County includes the unincorporated Oakley, Bethel Island, and Discovery Bay communities, as well as the City of Brentwood where significant growth is also planned. The central portion of the County, which experienced rapid growth through the 1980s, is approaching buildout and population is expected to decline slightly for the planning period.

Therefore, the most serious potential water service deficiencies that have been identified in Contra Costa County are found in the area of East County within the Urban Limit Line. A significant amount of residential and commercial growth in the City of Brentwood and the unincorporated community of Oakley is also allowed under the provisions of this General Plan.

The three key issues regarding future water service to the East County area within the Urban Limit Line involves: (1) the logistics of supplying water to the growth areas (constructing new pipelines, etc.); (2) identifying which water service agencies will assume responsibility for providing service; and (3) guaranteeing that an adequate supply of water will exist during normal and drought periods. The issue of which water district will commit to serving future populations is critical for the rapidly growing East County area. However, the Land Use Element of the General Plan (Chapter 3) is correlated with growth management policies of the Growth Management Element which defer new development until adequate water quantity and quality can be provided. In addition, infilling of already developed areas shall be encouraged before proposals that would prematurely extend development into areas lacking infrastructure are approved.

Wells, which have served as the primary water source in some rural parts of the County, are another source of water. However, the feasibility of continuing or expanding the areas served by wells, especially for the General Plan development which will occur in the East County, is dependent on the quality and quantity of the groundwater supplies. The major problem with groundwater quality is the concentration of nitrates in the supply.

Figure 7-2 highlights those areas in the County which have been identified by the County Health Department as containing groundwater nitrate concentrations that are higher than acceptable levels. Groundwater supplies in these identified areas are to be considered unsuitable as a future water source for rural residences because of public health risks.

Thus, further subdivision and construction of rural housing units ("ranchettes") will not be allowed under this General Plan, unless the subdivision and home construction conform to the criteria for the "Rural Residential Development Policy" included in the "Agricultural Resources" section of the Conservation Element. This policy requires that ranchette proposals meet applicable water quality standards as regulated by the County Health Services Department.

To assure adequate water supply and quality to serve the projected population for the General Planning period, the following goals and policies were developed.

#### WATER SERVICE GOALS

- 7-F. To assure potable water availability in quantities sufficient to serve existing and future residents.
- 7-G. To encourage the development of locally controlled supplies to meet the growth needs of the County.

- 7-H. To encourage the conservation of water resources available to the County and to the State.
- 7-I. To protect and enhance the quality of the water supplied to County residents.
- 7-J. To ensure that new development pays the costs related to the need for increased water system capacity.

#### WATER SERVICE POLICIES

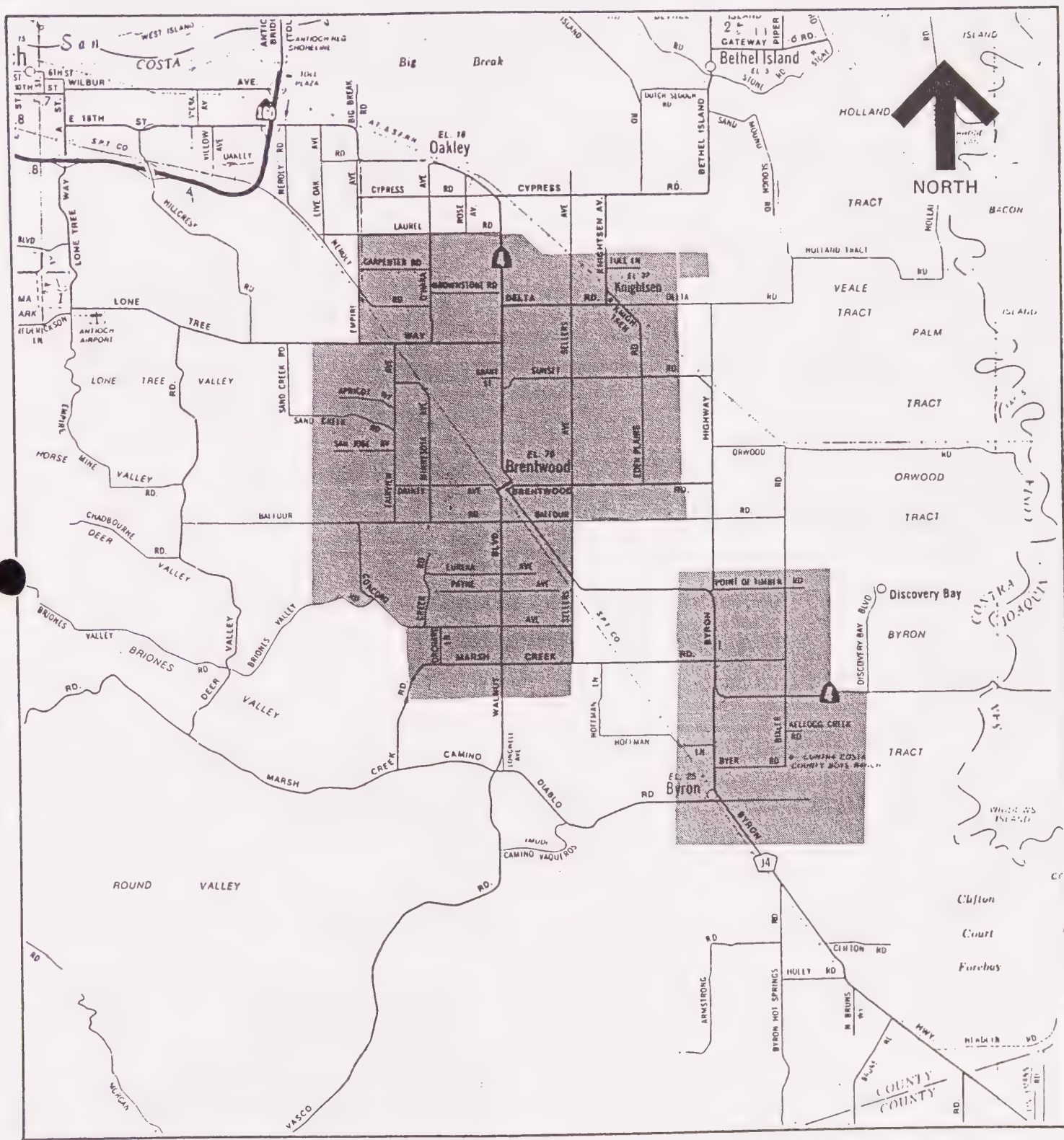
- 7-16. Water service systems shall be required to meet regulatory standards for water delivery, water storage and emergency water supplies.
- 7-17. Water service agencies shall be encouraged to establish service boundaries and to develop supplies and facilities to meet future water needs based on the growth policies contained in the County and cities' General Plans.
- 7-18. Water service agencies should generally be discouraged from constructing new water distribution infrastructure which exceeds future water needs based on the buildout projections of the County General Plan and city general plans.
- 7-19. Urban development shall be encouraged within the existing water Spheres of Influence adopted by the Local Agency Formation Commission; expansion into new areas within the Urban Limit Line beyond the Spheres should be restricted to those areas where urban development can meet all growth management standards included in this General Plan.
- 7-20. Development of rural residences or other uses that will be served by well water or an underground water supply will be discouraged if a high nitrate concentration is found following Health Services Department testing (see Figure 7-2).
- 7-21. At the project approval stage, the County shall require new development to demonstrate that adequate water quantity and quality can be provided. The County shall determine whether (1) capacity exists within the water system if a development project is built within a set period of time, or (2) capacity will be provided by a funded program or other mechanism. This finding will be based on information furnished or made available to the County from consultations with the appropriate water agency, the applicant, or other sources.
- 7-22. Water service agencies shall be encouraged to meet all regulatory standards for water quality prior to approval of any new connections to that agency.





Figure 7-2

# Areas of Identified High Nitrate Concentrations



AREAS OF HIGH NITRATE CONCENTRATION

- 7-23. The County shall cooperate with other regulatory agencies to control point and non-point water pollution sources to protect adopted beneficial uses of water.
- 7-24. Opportunities shall be identified and developed in cooperation with water service agencies for use of non-potable water, including ground water, reclaimed water, and untreated surface water, for other than domestic use.
- 7-25. Land uses and activities that could result in contamination of groundwater supplies shall be identified, monitored and regulated to minimize the risk of such contamination.
- 7-26. The need for water system improvements shall be reduced by encouraging new development to incorporate water conservation measures to decrease peak water use.
- 7-27. The reclamation of water shall be encouraged as a supplement to existing water supplies.
- 7-28. The County shall encourage its water serving agencies to prepare written drought contingency plans and hold public hearings on these plans. These plans should identify the size of needed drought capacity reserves. In requests for capacity verification for new development, the County shall require that the serving agency exclude these reserves from its operating capacities for the purpose of the verification.

## WATER SERVICE IMPLEMENTATION MEASURES

### Development Review Process

The following measures were developed in order to ensure adequate water supply and quality for the current and future goals of the General Plan and to ensure consistency with the land use and growth management elements.

- 7-i. Conditionally approve all tentative subdivision maps and other preliminary development plans on verification of adequate water supply for the project. Such condition shall be satisfied by verification, based on substantial evidence in the record, that capacity within the system to serve the specific development project exists or comparable demonstration of adequate wastewater treatment capacity. Where no tentative map or preliminary plan is required prior to development, approve no map or development permit without this standard being satisfied.
- 7-j. Identify, map, and monitor those areas where high levels of nitrates have been detected in groundwater supplies.
- 7-k. Discourage subdivisions or other permits which would allow the construction of rural residential units served by well water in areas of high nitrate concentrations, consistent with existing Health Department policy.
- 7-l. Discourage subdivisions or other permits which would allow the construction of rural residential units served by well water on lots of less than one acre, consistent with existing Health Department policy.



Intergovernmental Coordination

- 7-m. Encourage water service agencies and the Local Agency Formation Commission (LAFCO) to annex lands planned for urban development by this General Plan into their service areas. Conversely, encourage water agencies and LAFCO to detach the private lands from the service boundaries which are not planned for urban development and which are not currently served.
- 7-n. Encourage LAFCO to establish water service Spheres of Influence that are coincident with the boundary of planned urban development in this General Plan, including those rural properties that currently receive service.
- 7-o. Encourage the implementation of existing Urban Water Management Plans.
- 7-p. Encourage water service agencies to require separate service connections and meters where large quantities of water are used for special purposes such as landscape irrigation.
- 7-q. Encourage water agencies to provide potable water containing not more than 50 ppm sodium and 65 ppm chloride.

Water Conservation Program

- 7-r. Where feasible, include water conservation measures recommended by water service agencies in the conditions of approval for subdivisions and other new development.
- 7-s. Conduct regular inspections of public water systems under the jurisdiction of the County for leak detection, water audits, and repair and installation of individual meters.

**7.7 SEWER SERVICE****INTRODUCTION**

Sewer service in Contra Costa County is the responsibility of 13 municipalities and service districts. The largest sewage treatment agencies are Central Contra Costa Sanitary District (CCCSD), which serves most of the central portion of the County; Delta Diablo, which serves the Pittsburg-Antioch area; West Contra Costa Sanitary District (WCCSD), which serves a portion of Richmond, El Sobrante, and San Pablo; and the East Bay Municipal Utility District (EBMUD), which serves Kensington, El Cerrito, and a portion of Richmond.

Sewer service consists of the transmission of municipal and industrial wastewater to a treatment facility, treatment, and then disposal of the wastewater and residual waste solids. As with water service, several cities operate their own local sewage collection system and contract with the larger agencies to treat the effluent. Other cities operate their own collection systems as well as treatment plants.

Central Contra Costa Sanitary District provides wastewater (sewerage) collection and treatment services to all the cities and unincorporated areas of Central County, excluding the eastern side of the City of Martinez and the southernmost portion of the City of San Ramon (see Figure 7-3). In the cities of Concord and Clayton, municipal sewerage systems are responsible for wastewater collection and Central Sanitary treats the effluent. The District's wastewater treatment plant is located at the intersection of Route 4 and I-680. The treated wastewater is piped north and discharged into Suisun Bay.

The wastewater treatment plant operated by CCCSD previously had a capacity of approximately 35 million gallons per day (mgd) of sewage, which accommodated roughly 350,000 people. The plant has recently undergone a hydraulic expansion which increased capacity to 45 mgd, enabling it to accommodate future population growth of approximately 100,000 people over current levels.

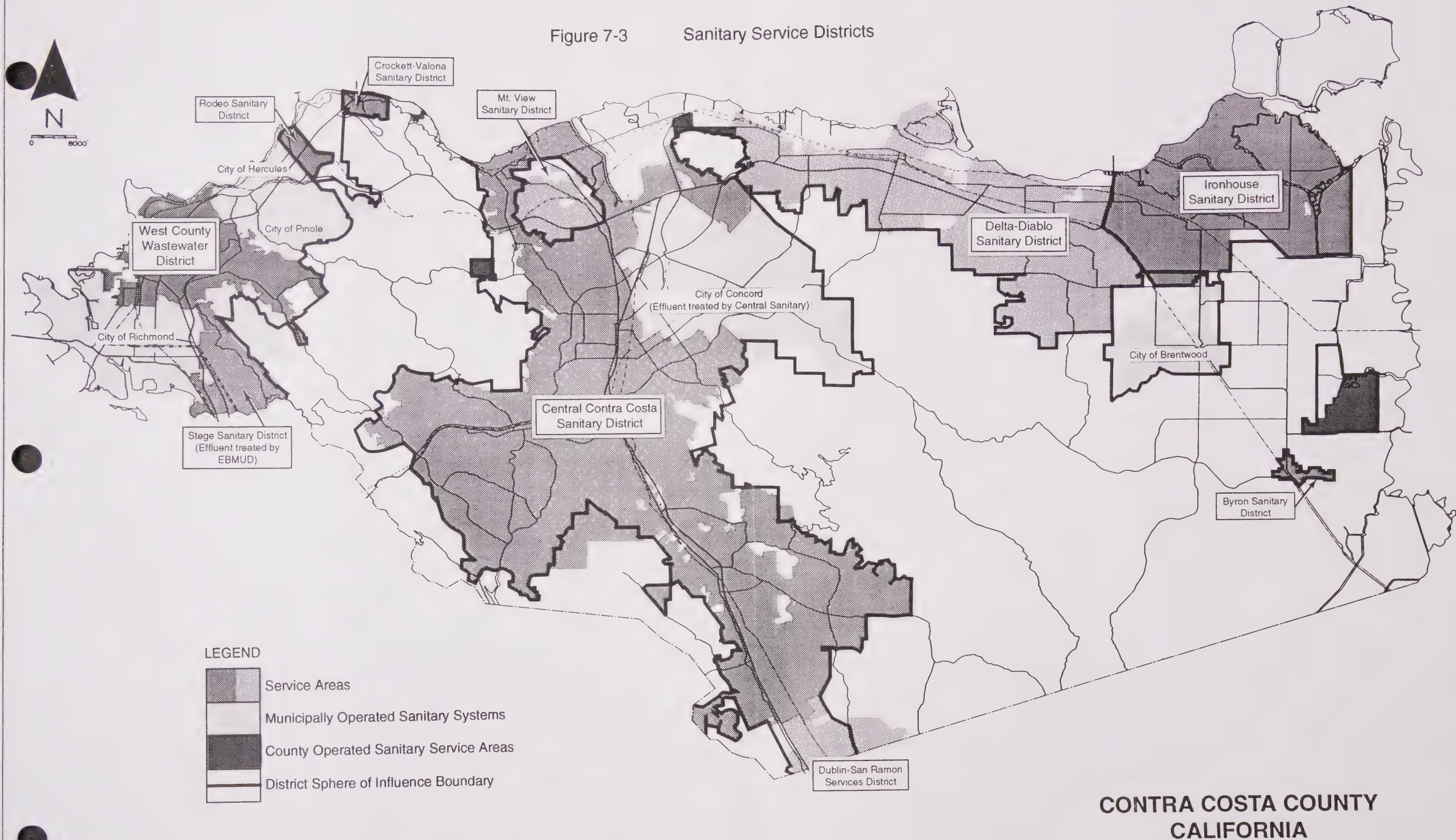
The Delta Diablo Sanitation District (also known as County Sanitation District No. 7-A) operates a sewage treatment plant that treats wastewater from unincorporated Bay Point (Zone 1 of the district), the City of Pittsburg (Zone 2), and the City of Antioch (Zone 3). The treatment plant has a capacity of 12.6 million gallons per day. The treated effluent is discharged into New York Slough and the Sacramento-San Joaquin System. Delta Diablo has responsibility for the interceptor (main) pipelines and collector system in Bay Point, but in the other two cities the sanitation district operates only the interceptor lines.

Delta Diablo Sanitation District also provides contract maintenance and operation of County Sanitation District 19, which is the sewage and water district system for the Discovery Bay community. Expansion of the water and sewage treatment system in Discovery Bay has been phased in conjunction with the buildout of the planned community. The treated effluent is discharged into a reclamation drain, and then into the Old River in the Delta.

The Oakley-Bethel Island Wastewater Management Authority (OBIWMA) is a Joint Powers Agency between Contra Costa County Sanitation District No. 15 (Bethel Island) and the Oakley Sanitary District (see Figure 7-3). The County and the Oakley utility operate respective collection facilities. The OBIWMA operates a newly constructed wastewater treatment plant northeast of downtown Oakley. This treatment plant processes approximately 1 mgd during average dry weather flow and has a treated wastewater disposal capacity of approximately 1.2 mgd. In 1988, construction was completed to increase disposal capacity to 2 mgd and can be expanded to 3 mgd.



Figure 7-3 Sanitary Service Districts







Bethel Island wastewater flows are relatively high in relation to the level of development which must be served, according to a recent report, because of a very high rate of inflow and infiltration of non-wastewaters into the Bethel Island sewage system. Capacity has been provided so that during wet weather Bethel Island has wastewater treatment capacity to handle these impacts.

The Oakley-Bethel Island plant has been granted a permit by the California Regional Water Quality Control Board to discharge treated effluent by irrigating nearby agricultural lands or leaching peat fields owned by the Authority and a local dairy. The most serious constraint to future development within the Oakley-Bethel Island sewerage district is not the lack of treatment capacity at the plant, but the lack of adequate land for disposal of treated effluent.

In West County, the City of San Pablo, parts of Richmond and Pinole, El Sobrante and other unincorporated areas in the vicinity, are served by the WCCSD (see Figure 7-3). The WCCSD operates a sewage treatment plant which has a design capacity of 12 mgd, although average dry weather flows are currently one half of that capacity (6 mgd). The District covers some of the areas in western Contra Costa County that have a high potential for future development (or redevelopment), including the entire North Richmond unincorporated area, and the lands along Castro Ranch Road in El Sobrante.

A municipally owned sewerage collection and treatment system serves approximately 50,000 customers in the City of Richmond, independent of the WCCSD. In addition, there are two autonomous sewer districts which serve the Rodeo and Crockett areas.

The Stege Sanitary District encompasses the Richmond Annex, the City of El Cerrito, and the unincorporated community of Kensington. This area was annexed by EBMUD in 1970. EBMUD treats effluent from the Stege Sanitary District under contract, while Stege is responsible for maintenance of the sewer lines.

The Dublin-San Ramon Services District (DSRSD) is a multi-purpose district which provides sewerage to approximately one-half of the City of San Ramon, generally the area south of Montevideo Drive. DSRSD is a member of the Livermore-Amador Valley Water Management Agency (LAVWMA), which operates a regional pipeline that transports treated effluent out of the Livermore-Amador Valley to an outfall in San Francisco Bay.

Each LAVWMA member is allocated a certain portion of the total discharge capacity, which is limited by the size of the pipeline that exports waste out the area. The DSRSD allocation is almost exhausted. A major effort to determine how to increase export capacity is currently underway.

There are three municipal sewer systems in the County which serve the following growth areas: Pinole, Hercules and Brentwood. The City of Pinole operates a sewage treatment plant which treats effluent from both the Pinole and Hercules municipal collection systems.

The City of Brentwood operates a small sewage treatment plant with a capacity of approximately 0.9 mgd. The plant is processing 0.5 mgd. and approved development projects account for another 0.3 mgd. Consequently, without further expansion of sewage plant capacity, no significant new projects can be assured for sewer hook-ups. The City hopes to have the new plant expanded by 1989. Phase I expansion will allow 3,000 dwelling units and increase capacity to 1.8 mgd. A second phase is proposed to allow further capacity to 2.7 mgd. This second expansion is currently in the design phase.

An important issue for Brentwood to resolve is their method of wastewater treatment. Like Bethel Island-Oakley, the City currently relies on land disposal (irrigating agricultural lands). However, as the City's required treatment capacity increases due to urban development, the land disposal option will become more costly.

As projected significant growth occurs in East County, the affected sewer entities will be faced with developing new systems or expanding existing systems for the disposal of treated wastewater. The two alternatives available to East County for the disposal of treated wastewater are land disposal and surface water discharge. The decision of which option to pursue will depend on each East County service area's needs and localized environmental conditions.

#### Map of Planned Sewer Facilities

The existing and planned service boundaries for the 13 sewer service agencies in Contra Costa County are shown in Figure 7-3. Like water districts, sewer districts are required by State law to have adopted "Sphere of Influence" boundaries which show the ultimate area that is expected to be served by the agency. The existing service is then expanded as necessary to include projected growth areas within the adopted Sphere of Influence boundary.



There are few areas in the County which are not currently included within an existing sewer service or Sphere of Influence boundary, but which are planned for development and will require service. As in the case of water service districts, however, there are areas which are included within the current sewer service boundaries or Sphere of Influence areas, but which are not planned for urban development under the provisions of this General Plan. These latter areas include open space properties owned by the regional park district, and lands outside the Urban Limit Line designated by this plan to remain in agricultural uses. These areas should ultimately be detached from the sewer service districts. Areas of future development projected outside of existing service boundaries could generally be accommodated by expansion of a particular service agency. However, certain areas projected to grow outside the service boundaries could be served by one of several agencies.

Sewer service to West and Central County and the Pittsburg-Antioch area has been planned to meet projected demand resulting from existing and future development. However, several issues have been identified which may influence the method of sewer service disposal used for some growth areas in the East County area.

Projected growth in East County communities (Oakley, Brentwood, Bethel Island) is far in excess of the existing wastewater treatment/disposal capacity. The current method of wastewater disposal in these areas is either land disposal (land application of treated wastewater onto open space or agricultural lands), or discharge into the San Joaquin-Sacramento Delta. Expanding this land disposal technique may be impractical in the future due to the large amount of land that would be required for the disposal of wastewater generated by projected growth. However, this option may be more feasible if a higher level of wastewater treatment was able to generate wastewater suitable for irrigation of a wider range of agricultural crops.

In addition to the discharge of treated effluent into rivers or onto agricultural land, a third form of sewage treatment, septic tanks and leachfields, is used in rural areas where no public service is available. The use of leachfields and septic tanks is not practicable, however, in some of the rural areas of Contra Costa County where shallow groundwater tables, high nitrate concentrations in groundwater, or soils with poor percolation (absorption) characteristics are present.

In selected areas, the County Health Officer has established a moratorium on the issuance of permits for any additional septic tank systems. The locations of the existing septic tank moratorium areas are illustrated on Figure 7-4. The approval of minor subdivisions for rural residential or ranchette development in these areas is generally not allowed. Other areas may be placed in moratorium areas if conditions warrant that action.

The County has also adopted measures to ensure that subdivision of lands and placement of septic tanks and leachfields is regulated within the watershed of the County's major reservoirs.

In order to provide for the waste disposal needs of the General Plan, the following goals and policies were developed.

#### SEWER SERVICE GOALS

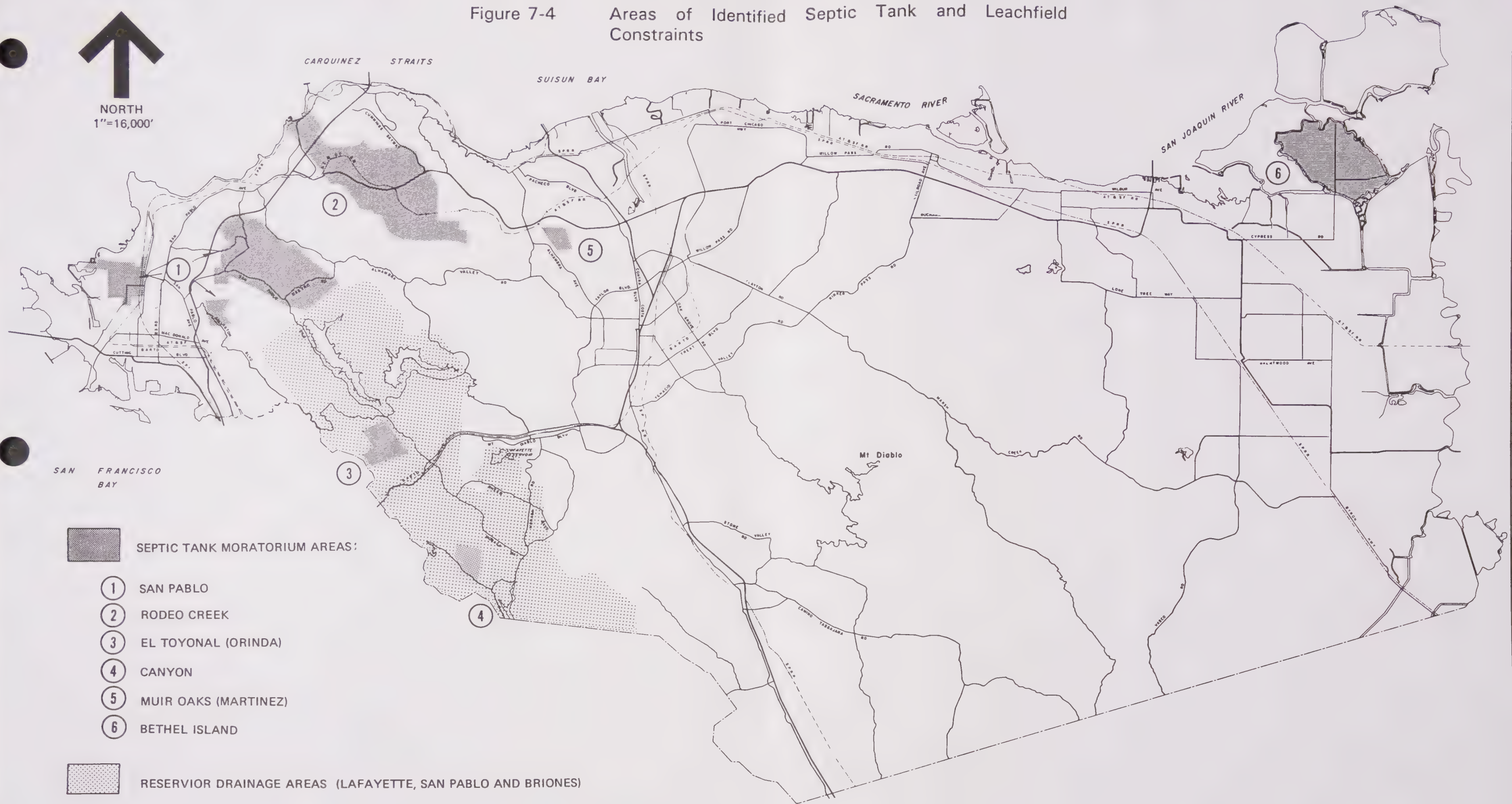
- 7-K. To provide sewer collection, treatment and disposal facilities adequate to meet the current and projected needs of existing and future residents.
- 7-L. To provide wastewater treatment that preserves, and to the extent feasible, enhances water quality and the natural environment.
- 7-M. To develop wastewater reclamation as a supplement to imported surface water supplies.
- 7-N. To assure that new development pays the costs related to the need for increased sewer system capacity.

#### SEWER SERVICE POLICIES

- 7-29. Sewer treatment facilities shall be required to operate in compliance with waste discharge requirements established by the California Regional Water Quality Control Board. Development that would result in the violation of waste discharge requirements shall not be approved.
- 7-30. Sewer service agencies shall be encouraged to establish service boundaries and develop treatment facilities to meet future service needs based on the growth policies contained in the County and cities' General Plans.
- 7-31. Urban development shall be encouraged within the sewer Spheres of Influence adopted by the Local Agency Formation Commission. Expansion into new areas within the Urban Limit Line but beyond the Spheres of Influence should be restricted to those areas where urban development can meet growth management standards included in this General Plan.
- 7-32. Development of rural residences, or other uses, that will be served by septic tank and leachfields, shall be discouraged in areas with high groundwater levels or soils with poor percolation characteristics.
- 7-33. At the project approval stage, the County shall require new development to demonstrate that wastewater treatment capacity can be provided. The County shall determine whether (1) capacity exists within the wastewater treatment system if a development project is built within a set period of time, or (2) capacity will be provided by a funded program or other mechanism. This finding will be based on information furnished or made available to the County from consultations with the appropriate water agency, the applicant, or other sources.



Figure 7-4 Areas of Identified Septic Tank and Leachfield Constraints



SOURCE: Contra Costa County Health Department 1978





- 7-34. For future sewer facilities that may be required, appropriate land areas in the County shall be designated consistent with other policies in the General Plan.
- 7-35. Opportunities for using reclaimed wastewater shall be identified and developed in cooperation with sewer service and water service agencies.
- 7-36. Beneficial uses of treated wastewater including marsh enhancement and agricultural irrigation shall be encouraged. Such wastewater reclamation concepts shall be incorporated into resource management programs and land use planning.
- 7-37. The need for sewer system improvements shall be reduced by requiring new development to incorporate water conservation measures which reduce flows into the sanitary sewer system.

#### SEWER SERVICE IMPLEMENTATION MEASURES

In accordance with the land use and growth management elements of the General Plan that limit growth until adequate waste management services can be provided, the following measures were developed in order to provide for the liquid waste disposal needs of the community.

##### Development Review Process

- 7-t. Conditionally approve all tentative subdivision maps and other preliminary development plans on verification of adequate wastewater treatment capacity for the project. Such condition shall be satisfied by verification based upon substantial information in the record that capacity within the system to serve the specific development project exists or comparable demonstration of adequate wastewater treatment capacity. Where no tentative map or preliminary plan is required prior to development, approve no map or development permit without this standard being satisfied.
- 7-u. Identify, map, and monitor those areas where high groundwater levels and soils with poor percolation characteristics have been detected.
- 7-v. Discourage approval of subdivisions or other permits which would allow the construction of rural residential units served by septic tanks and leachfields in areas of high groundwater levels or poor percolation characteristics, consistent with existing Health Department policy.
- 7-w. Continue to enforce Sections 420-6.002 and 4200-6.008 of the County Code, which regulate the placement of septic tanks within the watersheds of reservoirs.
- 7-x. Include wastewater reduction and other measures recommended by sewer service agencies in the conditions of approval for subdivisions and other new development.

##### Intergovernmental Coordination

- 7-y. Encourage sewer service agencies and the Local Agency Formation Commission (LAFCO) to annex lands planned for urban development by this General Plan into their service areas.

- 7-z. Encourage LAFCO to establish sewer service Spheres of Influence that are coincident with the boundary of planned urban development in this General Plan, including those rural areas that currently receive service.

## 7.8 DRAINAGE AND FLOOD CONTROL

### INTRODUCTION

The implementation of drainage facilities in the County falls under the jurisdiction of either the 18 cities, the County for the unincorporated areas, or the County Flood Control and Water Conservation District, which has adopted plans which serve both cities and the County. All three groups generally use the same design criteria in sizing and evaluating drainage systems. The basic unit for storm drainage planning is a watershed. Watershed boundaries do not coincide with political boundaries, but are determined by topography, or the "lay of the land."

Unlike domestic water and sanitary systems, the pattern of storm water drainage is determined by water's natural tendency to flow downhill. Consequently, much of the drainage system serving the County consists of natural drainage swales, ditches and watercourses. During the urbanization process, developers replace most of the swales and ditches with underground storm drains or concrete lined ditches. To a lesser extent, natural watercourses such as creeks may also be modified during the development process. Normally creeks are modified only when the natural watercourse is determined to be inadequate for flood control, or when erosion threatens the proposed development plan.

The cities and the County Flood Control and Water Conservation District have developed regional drainage plans in many areas to guide developers in the implementation of new drainage systems serving development, and to provide the basis for local and federal flood control projects. Local drainage infrastructure is provided by developers as part of the land development process.



### Map of Planned Drainage and Flood Control Facilities

Numerous existing or potential storm drainage problems have been identified in the County. There are three types of flood control projects that should be constructed in order to mitigate drainage problems: (1) local and regional facilities needed to solve existing flooding problems; (2) local and regional facilities needed to accommodate the runoff anticipated from future urban development; and (3) improvements to the levee system in the San Joaquin-Sacramento Delta. All three kinds of projects are discussed below.

A large number of unfunded projects are needed to correct existing flood control problems. The total cost of the projects necessary to correct these problems is estimated to range from \$500 to \$800 million (included in this estimated cost is \$53 million for levee rehabilitation projects, discussed separately below). The individual flood control projects and their estimated costs are itemized in the Technical Appendix to this plan.

Many of the existing flood control problems are in the Central and West County areas. Because many of the affected areas are already developed, assistance from future development in the form of drainage fees cannot be expected to completely mitigate existing and future problems. The Federal and State governments have provided some funding for projects such as these, but there is still a large shortfall.

The construction of specific local collector drainage systems and regional drainage facilities will be required to accommodate future development and to mitigate the resultant increase in peak runoff from urbanization. However, present procedures for requiring all new development to pay its fair share of needed drainage infrastructure are cumbersome and inconsistently applied. Many, but not all, major development projects are required to mitigate the increase in storm water runoff they cause, but most smaller developments do not contribute to the regional mitigation solution. Many of the smaller developments are located in existing urbanized areas and, due to their size, are unable to bear the full cost of the needed drainage improvements. Frequently, these developments are allowed to proceed without contributing to the long-range solutions. An additional problem is the inconsistencies in the amounts of drainage improvement fees required by the various cities and the County.

Preparing regulations for the formation of drainage area plans and the adoption of fees is a time consuming process. The process is complicated by the lengthy period of study which is needed to evaluate various alternatives to find a solution that is functional, economically feasible, and environmentally and socially acceptable.

Following the adoption of a drainage plan, drainage fees can be assessed against new development within the drainage area. Because drainage fees can only be assessed on new developments occurring within adopted drainage areas, developments built within areas not yet established as adopted drainage areas do not pay standardized drainage fees but must meet the collect and convey requirements of the subdivision ordinance. Furthermore, they must comply with drainage requirements imposed as conditions of approval development approval.

Figure 7-5 is a County map outlining the numerous flood control drainage areas and a "generalized urban use boundary," i.e., the perimeter of planned urban development allowed under this General Plan. The drainage areas have been categorized according to the status of adopted drainage plans and fees required for new development in each area, as described below:

- o Flood Control Drainage Areas With Established Fees and/or Payment for Drainage Mitigation

The drainage areas with established fees have undergone sufficient study by the County Flood Control and Water Conservation District for development of a drainage plan, the plan has been adopted by the Board of Supervisors, and fees have been established. Approved development projects in these drainage areas are assessed a fee based upon the impervious (impenetrable) surface that they create, or the number of acres that are developed. Also included in Figure 7-5 under this category are lands for which development is assessed flood control fees by an agency other than the County Flood Control and Water Conservation District, e.g. the City of Walnut Creek.

For other areas of the County in this category, a drainage plan has not been formally adopted and fees have not been established, although payment for drainage mitigation has been established as a condition of approval for new development. In most cases, larger development projects are required to make these mitigation payments, although the requirement may not be consistently applied to smaller projects.

- o Drainage Areas Under Study

Figure 7-5 indicates a large area in East Contra Costa County which is currently under study by the County Flood Control and Water Conservation District. This study will lead to the preparation of a drainage plan that is designed to mitigate increased stormwater flows generated by planned development. The plan will calculate a standardized fee to be applied to all new development to fund the necessary improvements.

The third type of flood control improvement, in addition to regional and local projects needed to accommodate existing or planned development, is levee rehabilitation. Levee rehabilitation projects are required to improve the structural integrity of existing levees in the Delta area, especially in the Bethel Island, the Hotchkiss Tract and the Veale Tract areas, which are considered inadequate. The State Department of Water Resources has estimated costs of \$3.9 million for Bethel Island, \$8 million for Hotchkiss Tract. Recently \$7 million was

spent on improvements to Veale Tract. The construction of major new subdivisions adjacent to the islands may warrant even greater investments for adequate protection.

Two other issues that need to be addressed in the rehabilitation of levees are the continued settlement of the levees due to subsidence conditions, and the expected rise in Delta surface water due to the anticipated rise in ocean levels due to the "greenhouse effect." These two flood control issues are dealt with in great detail in the "Flooding" section of the Safety Element.

It should be noted that numerous other goals and policies regarding the preservation of creeks and other watercourses in the County are included in the "Urban and Rural Creeks" section of the Open Space/Conservation Element. Those policies should be read in concert with those listed below to get a complete understanding of how flood control and open space issues are to be resolved.

In order to provide for the protection of the public from the hazards of flooding and to provide a surface water drainage system for projected growth as adopted by this General Plan, the following goals and policies were adopted.

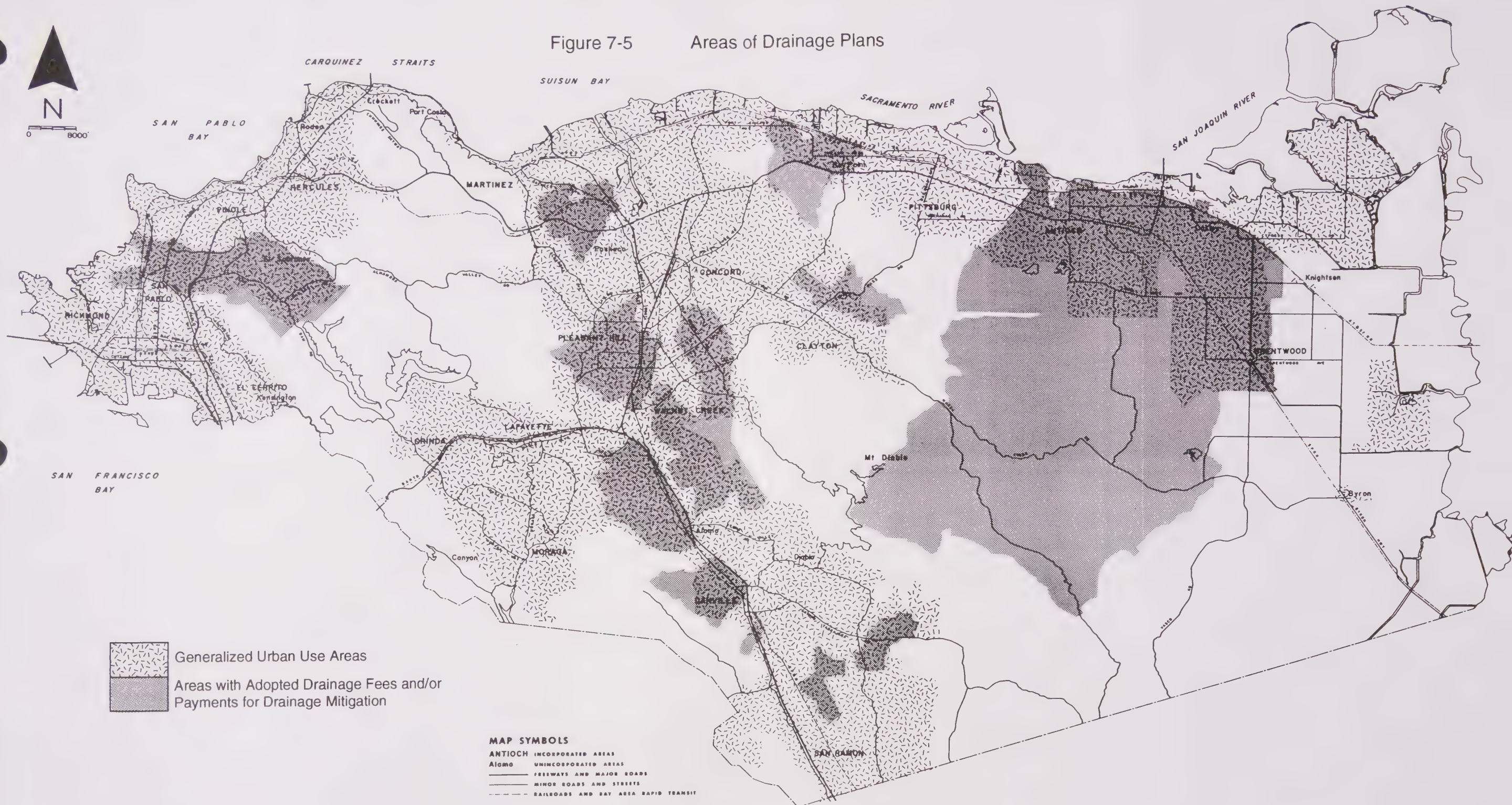
#### DRAINAGE AND FLOOD CONTROL GOALS

- 7-O. To protect and enhance the natural resources associated with creeks and the Delta, and their riparian zones, without jeopardizing the public health, safety, and welfare.
- 7-P. To protect creeks and riparian zones identified as valuable from damage caused by nearby development activity.
- 7-Q. To employ alternative drainage systems improvements which rely on increased retention capacity to lessen or eliminate the need for structural modifications to watercourses, whenever economically possible.
- 7-R. To enhance opportunities for public accessibility and recreational use of creeks, streams, drainage channels and other drainage system improvements.
- 7-S. To encourage private programs which assure ongoing maintenance of natural watercourses utilizing methods which retain the characteristics of natural watercourses.
- 7-T. To ensure that new development pays its fair share of the costs related to increased runoff created by the development.
- 7-U. To support the concept that existing development pays the cost of building and maintaining drainage improvements required to serve existing developed areas.





Figure 7-5 Areas of Drainage Plans



**CONTRA COSTA COUNTY  
CALIFORNIA**





**DRAINAGE AND FLOOD CONTROL POLICIES**

- 7-38. Watershed management plans shall be developed which encourage the development of detention basins and erosion control structures in watershed areas to reduce peak stormwater flows, as well as to provide wildlife habitat enhancement.
- 7-39. Land use plans and zoning shall be the primary means for floodplain management in preference to structural improvements, where possible.
- 7-40. Alternative drainage system improvements such as floodplains, leveed floodways, bypass channels and culverts, and detention basins, shall be incorporated into new flood control plans and existing plans as they are revised.
- 7-41. Aesthetic, environmental, and recreational benefits shall be taken into full consideration when determining the costs and benefits of alternative drainage system improvements.
- 7-42. Design guidelines shall be prepared which address aesthetic and engineering characteristics and criteria for alternative drainage system improvements.
- 7-43. Public participation shall be encouraged in the design of major flood control projects.
- 7-44. New development should be required to finance its legal share of the full costs of drainage improvements necessary to accommodate projected peak flows due to the project. Reimbursement from subsequent developments which benefit from the added capacity may be provided.
- 7-45. On-site water control shall be required of major new developments so that no significant increase in peak flows occurs compared to the site's pre-development condition, unless the Planning Agency determines that off-site measures can be employed which are equally effective in preventing adverse downstream impacts expected from the development or the project is implementing an adopted drainage plan.
- 7-46. Regional detention basins shall be favored over smaller, on-site detention basins.
- 7-47. Where required, if it is not possible to provide a channel cross section sufficient to carry the 100-year flow, detention basins should be developed.
- 7-48. Open bypass channels, detention basins and all drainage facility rights of way which are provided at different locations in order to supplement existing natural creeks should be developed as an asset to the development, e.g., as a secondary recreation use.
- 7-49. Natural streams and channels which have been structurally modified shall be evaluated for potential use as urban open spaces, linear parks, and trails. Cities and other agencies responsible for recreation shall be encouraged to undertake this evaluation.
- 7-50. Public access to watercourses shall be required of major new developments when liability, security, and maintenance issues can be satisfactorily resolved.
- 7-51. Detention basins shall be designed for multiple uses such as parks and playing fields when not used for holding water, if liability and maintenance issues can be satisfactorily resolved.

- 7-52. Plans for Delta levee rehabilitation and maintenance should be developed to protect the beneficial uses of the Delta.
- 7-53. Plans for Delta levee rehabilitation and maintenance should consider methods to foster riparian habitat to the fullest extent possible consistent with levee integrity.
- 7-54. Agencies whose projects benefit from Delta levee protection, including State and Federal government (water, highway, fish and wildlife, and recreational projects), PG&E, and private railroad companies, shall participate in funding all Delta levee improvements and maintenance.
- 7-55. As appropriate and to the extent allowed by law, assess all new development projects at least \$0.35 per square foot of impervious surface created. This drainage fee is to be collected through existing County Flood Control drainage area fee ordinances, newly adopted drainage area fee ordinances, existing and new assessment districts, or other financial entities. The fee may be applied to the cost of any developer-sponsored regional flood control improvements on- or off-site which mitigate the project's flooding impacts. Regional facilities are defined as systems sized to handle at least 15 cubic feet per second and suitable for public agency maintenance, i.e., 24-inch diameter and larger storm drains.
- 7-56. All residential and non-residential uses proposed in areas of special flood hazards, as shown on FEMA maps, shall conform to the requirements of County Floodplain management applied to all ordinances, approved entitlements (land use permits, tentative, final, and parcel maps, development plan permits, and variances) and ministerial permits (buildings and grading permits).

## DRAINAGE AND FLOOD CONTROL IMPLEMENTATION MEASURES

### Flood Control Techniques

- 7-aa. Encourage gabion-type construction, instead of extensive riprap or concrete lining, to stabilize creek banks.
- 7-ab. Utilize check dams and drop structures to control erosion within natural watercourses, where creek capacity and bank stability permits.
- 7-ac. Utilize bypass culverts, detention basins, and floodplain easement acquisitions, when such means are available, as alternatives to structural modifications of watercourses.

### Benefit Assessment Districts

- 7-ad. Create benefit assessment districts to pay for drainage maintenance activities resulting from new developments that require maintenance above the County standard maintenance activities.
- 7-ae. Consider the creation of benefit assessment districts to pay for drainage maintenance activities in existing developed areas. Exempt agricultural land and other land uses that do not produce stormwater flows in excess of natural conditions from benefit assessments for building or maintaining drainage facilities, unless such facilities directly benefit the agricultural or open space use or their inclusion is required by law.

Development Review Process

- 7-af. As appropriate, exclude drainage easements and areas with deeded development rights for drainage purposes in the minimum lot size determination.
- 7-ag. Encourage public fee ownership of all open, government maintained drainage facilities to ensure that the adjacent developing properties contain sufficient usable area to meet the specified land use and to provide for secondary use as recreational and visual resources.
- 7-ah. Protect natural channels that are not to be maintained by government by requiring dedicated development rights; protect storm drain pipes by requiring drainage easements; and seek to secure open government-maintained facilities by fee title land rights.
- 7-ai. As a high priority for implementing this General Plan and to the extent allowed by law, review and consider amending all drainage ordinances to ensure that all drainage fees required by drainage plans or other ordinances:
  - (a) are revised at the beginning of each calendar year or as appropriate to reflect inflation (as measured for the San Francisco region by the U.S. Department of Housing and Urban Development); and
  - (b) are based upon an up-to-date estimate of the projected costs of flood control improvements that are required within the drainage area to ensure protection from a 100-year flood; and
  - (c) are at least \$0.35 per square foot of added impervious surface.

Other Ordinances and Regulations

- 7-aj. Continue in force or adopt ordinances to prevent property owners from causing an obstruction in a watercourse and a code enforcement program to assure adequate compliance with the ordinance.
- 7-ak. Continue to administer the Floodplain Management Ordinance.
- 7-al. Encourage integrated pest and weed management methods which reduce or eliminate the use of pesticides and herbicides for watercourse maintenance.

**7.9 PUBLIC PROTECTION****INTRODUCTION**

Public protection services are essential to the community in responding to day-to-day emergencies, as well as to potential future demands due to a major earthquake or other disaster. Policies regarding routine police services are described in this section; policies regarding disaster preparedness and response are found in the "Public Protection Services and Disaster Planning" section of the Safety Element.



Police services in Contra Costa County are provided by a number of agencies at several levels of government. These agencies include:

- o the Federal Bureau of Investigation;
- o the California Highway Patrol;
- o the Contra Costa County Sheriff's Department;
- o the individual city police departments;
- o the Kensington Police District (in unincorporated Kensington);
- o the East Bay Regional Parks District Police;
- o the State Park Rangers; and
- o the Bay Area Rapid Transit District Police.

In addition, several agencies within the County provide specialized protection for specific areas or types of property. These agencies include:

- o the Contra Costa County Housing Authority, which polices public housing projects;
- o the U.S. Military Police, which covers military property;
- o private patrols for some industrial and commercial developments; and
- o private patrols for some residential developments.

The Contra Costa County Sheriff's Department provides police protection services for all unincorporated areas in the County. Additionally, the Department sponsors a number of programs designed to deter crime in residential neighborhoods. These include Neighborhood Watch programs, which involve fostering acquaintance among neighbors and an attitude of care for neighboring properties, and placement of permanent identification markings on household items and signs on property indicating that valuable items have been marked (Operation I.D.). These programs have resulted in reduced rates of theft and other types of crime in neighborhoods throughout the County.

Defensible space design guidelines are also a valuable means of deterring crime in new developments. "Defensible space" is the concept of designing buildings and neighborhoods to promote the proprietary interest of the residents in neighborhood activities, to permit the identification of suspicious circumstances and persons, and to indicate to the potential criminal that he or she would have a high risk of apprehension.

The principles of defensible space include:

- o a visually well defined separation between public and private areas;

- o well lighted and windowed apartment stair wells;
- o apartment corridors accessible from only one exterior entrance;
- o windows placed for easy resident surveillance of entryways of public and semi-public areas;
- o absence of interior hiding places;
- o short streets ending in cul-de-sacs in single-family residential areas; and
- o landscaping to permit surveillance of open areas and entryways.

Defensible space design principles have demonstrated a high rate of crime deterrence in residential as well as other types of development.

In order to provide an acceptable level of police protection service for the projected population as provided by this General Plan and to improve the level of efficient police protection needed through the land use planning and review process the following goals and policies were developed.

#### PUBLIC PROTECTION GOALS

- 7-V. To provide a high standard of police protection services for all citizens and properties throughout Contra Costa County.
- 7-W. To incorporate police protection standards and requirements into the land use planning process.
- 7-X. To encourage public participation in crime prevention activities.

#### PUBLIC PROTECTION POLICIES

- 7-57. A sheriff facility standard of 155 square feet of station area per 1,000 population shall be maintained within the unincorporated area of the County. (Also see Growth Management Element.)
- 7-58. Sheriff patrol beats shall be configured to assure minimum response times and efficient use of resources.
- 7-59. A maximum response time goal for priority 1 or 2 calls of five minutes for 90 percent of all emergency responses in central business district, urban and suburban areas, shall be strived for by the sheriff when making staffing and beat configuration decisions.
- 7-60. Levels of service above the county-wide standard requested by unincorporated communities shall be provided through the creation of a County Service Area or other special governmental unit.
- 7-61. Increased costs associated with the County's jail system shall not reduce the level of sheriff patrol service throughout the County.

## PUBLIC PROTECTION IMPLEMENTATION MEASURES

- 7-am. Maintain a sheriff's sub-station in each geographical area of the County (East, West, Central, South Central) to serve the individual needs of that area, if warranted. Facility size should be guided by Policy 7-58 and should be commensurate with staffing needs, with provision for future expansion to match projected increases.
- 7-an. Encourage the Sheriff's Department, in cooperation with the Community Development Department, to develop guidelines for defensible space design of buildings and major subdivision projects. Include such guidelines in the review of development projects to assure that crime-inviting features are reduced or eliminated.
- 7-ao. Encourage the use of citizen action programs sponsored by the Sheriff such as Neighborhood Watch and Operation ID.
- 7-ap. Consider the use of community service officers to provide law enforcement outreach programs to schools and other institutions.
- 7-aq. In developing areas the Sheriff protection service standard shall be achieved by creation of a County Service Area and special tax and/or creation of a Mello Roos Community Facilities District that generates special tax revenue to support additional increments of Sheriff patrol necessary to meet the adopted service standard. Developers, prior to receiving development approvals, should agree (via a Development Agreement or a landowner election) to participate in such special funding districts.
- 7-ar. Public protection facilities needs will be included in the 5-year Capital Improvements Program to ensure that the facilities will be available as development proceeds.

## 7.10 FIRE PROTECTION

### INTRODUCTION

A total of 19 fire departments provide fire protection and suppression services to Contra Costa County. Of this total, 12 are governed by the County Board of Supervisors. Though the County does not have governing authority over the remaining seven agencies, several important relationships exist. The jurisdictional relationships among fire protection agencies and the County are summarized in Table 7-1. All fire agencies within the County have signed mutual aid agreements to provide assistance to neighboring agencies.

Table 7-2 summarizes the departments and their jurisdictional status, organized by Fire Protection Area (FPA). The FPA's were established as part of the County's 1984 Fire Protection Plan for the purpose of projecting the geographic distribution of future growth. Table 7-2 also lists the various fire agencies which operate within each of the FPA's.



Responsibility for the review and approval of land use applications and development projects rests with a number of agencies. Primary responsibility for fire safety review involves the fire agencies. In their review, the agencies rely upon a number of sources, including the Uniform Building Code of California (UBC), which provides standards and guidelines related to firewalls, building separation, and other fire safety related construction standards used throughout the State for reviewing projects.

In addition, the County Community Development Department, in its review and approval process of applications within unincorporated areas, relies upon standards contained in the Contra Costa County Code (Title 9: Subdivisions). The County Code includes a number of provisions relevant to fire protection and suppression as they apply to subdivision map approval. These include street design (turning radius, width, slope, etc.) and provision of fire hydrants.

The current County Sprinkler Ordinance requires that developers provide all home buyers with the option of sprinkler installation. In Planned Unit Developments with model homes, the Ordinance requires that at least one model be equipped with sprinklers. This plan endorses an amendment to the Code that would require all new residential construction to install sprinklers in all units.

Projects which fall within a city boundary are subject to city review rather than County review. Some cities have adopted various ordinances related to fire protection, including development standards for fire-resistant roofing materials.

The primary source of revenues for fire protection and suppression activities is property taxes. Other sources include fees and charges for inspection services, and exactions and dedications levied as conditions of project approval. Ordinances which implement development fees are established for certain districts and the Special District Augmentation Fund.

In 1986, the County adopted an ordinance to allow the establishment of fire facility fees. This policy is currently being implemented via ordinances establishing the exact amount of the fees for specific agencies' service areas. The implementing ordinances adopted by the County apply to County-governed agencies with adopted five-year plans, and agencies which are independent districts. The County collects the fees in the unincorporated portion of the independent district.

TABLE 7-1  
RELATIONSHIP OF FIRE PROTECTION AGENCIES  
TO CONTRA COSTA COUNTY

| <u>Type of Agency<br/>Organization</u>                      | <u>Number of<br/>Agencies</u> | <u>Relationship to County<br/>Planning and Service Provision</u>  |
|---|-------------------------------|---|
| Fire Departments<br>governed by the<br>Board of Supervisors | 11                            | Board of Supervisors establishes policy,<br>approves budgets and implements legislation.                              |
| Independent Fire<br>Protection Districts                    | 3                             | County implements/collects development fees<br>in the unincorporated portion of the district.                         |
| City Fire Departments                                       | 4                             | County has no authority.  |
| All Agencies  | 19                            | Mutual Aid Agreements exist between agencies.<br>Land use decisions by County may influence<br>provision of services. |

TABLE 7-2  
CONTRA COSTA FIRE PROTECTION AND SUPPRESSION  
SERVICES BY FIRE PROTECTION AREA (FPA)

| <u>Area</u>      | <u>Governed by<br/>County Board<br/>of Supervisors</u>                           | <u>Independent<br/>District</u>          | <u>Department</u>                                   |
|------------------|--|--|---|
| Central          | Moraga FPA<br>Orinda FPA<br>CCC Consolidated FPA                                 |  |   |
| East             | Riverview FPA<br>Oakley FPA<br>Bethel Island FPA<br>East Diablo FPA<br>Byron FPA |  |   |
| San Ramon Valley |  | San Ramon<br>Valley FPD                  | Dougherty Regional<br>Fire Authority<br>(San Ramon) |
| West             | West Co. FPD<br>Pinole FPA<br>Crockett-Carquinez FPA                             | Rodeo-<br>Hercules FPA<br>Kensington FPA | Richmond FD<br>El Cerrito FD<br>Pinole FD           |



Benefit assessment districts are in the process of being implemented in service areas of County-governed agencies, under the authority of Government Code Article 3.6, Section 50078-50078.20. The County has adopted an ordinance establishing a benefit assessment district in the unincorporated area served by the Rodeo-Hercules Fire Protection District.

Redevelopment law provides for the Redevelopment Agency to "freeze" the property tax revenues allocated to other agencies within a redevelopment area, and use those revenues for redevelopment projects. While this process is intended to revitalize the redevelopment project area, it can have a negative fiscal impact upon agencies which must continue to serve the area. Currently, the County maintains an "unwritten policy" to allow fire agencies to continue to receive tax revenue increases as they occur.

Of critical importance to reducing fire-related losses are fire prevention techniques and successful fire control and extinguishment. The latter requires that fire fighters and equipment are able to arrive at the scene promptly. In light of the planning and financing efforts described above, these critical factors suggest a number of specific fire protection-related issues and requirements, as follows:

- o Aging fire protection facilities and equipment need to be improved and/or replaced.
- o Continued development in the County will require the addition of fire stations.
- o Reorganization of existing station locations would improve utilization of service capabilities.
- o Inter-jurisdictional coordination needs to be maintained and improved. For example, plans influencing future growth and development within fire service areas need to be reviewed by the affected fire service agency. Planning for fire station locations requires current knowledge of growth projections both within the fire service area as well as in neighboring areas.
- o The needs described above require a long-term source of funding not adequately addressed by existing sources. Proposition 13, adopted by California voters in 1978, limited property tax growth and significantly reduced fire agencies' ability to rely upon property taxes as a source of funding. Dedications and exactions as conditions of project approval are an uncertain revenue source.
- o Equitable means of distributing the financing burden are necessary.
- o Development and enforcement of standards to reduce risks of fire loss in fire hazard areas are required. This issue is particularly acute due to wildlife hazards and/or lack of adequate water provision.
- o Development and enforcement of standards to reduce risks of fire loss in structural fires should continue. These standards may include, for example, built-in fire protection and extinguishment features; use of fire-retardant materials and full parapet common walls; and features to aid access to high-rise buildings.

This plan requires that adequate fire protection services be provided as part of the service standards included in the Growth Management program (Chapter IV). In order to provide efficient fire service through the land use planning and review process, the following goals and policies were developed.

#### Map of Planned Fire Protection Facilities

Five-year plans have been prepared for some of the fire agencies which are governed by the County Board of Supervisors. These plans identify locations of proposed new stations, as well as station relocations, and financing sources.

Figure 7-6 illustrates the generalized locations of existing fire stations to be retained; existing fire stations proposed for relocation; and locations of new fire stations.

#### FIRE PROTECTION GOALS

- 7-Y. To ensure a high standard of fire protection, emergency, and medical response services for all citizens and properties throughout Contra Costa County.
- 7-Z. To reduce the severity of structural fires and minimize overall fire loss.
- 7-AA. To incorporate requirements for fire-safe construction into the land use planning and approval process.
- 7-AB. To minimize the cost of fire protection services through utilization of modern fire protection practices and technologies.
- 7-AC. To locate and design new fire stations in a manner compatible with surrounding development.
- 7-AD. To provide special fire protection for high-risk land uses and structures.

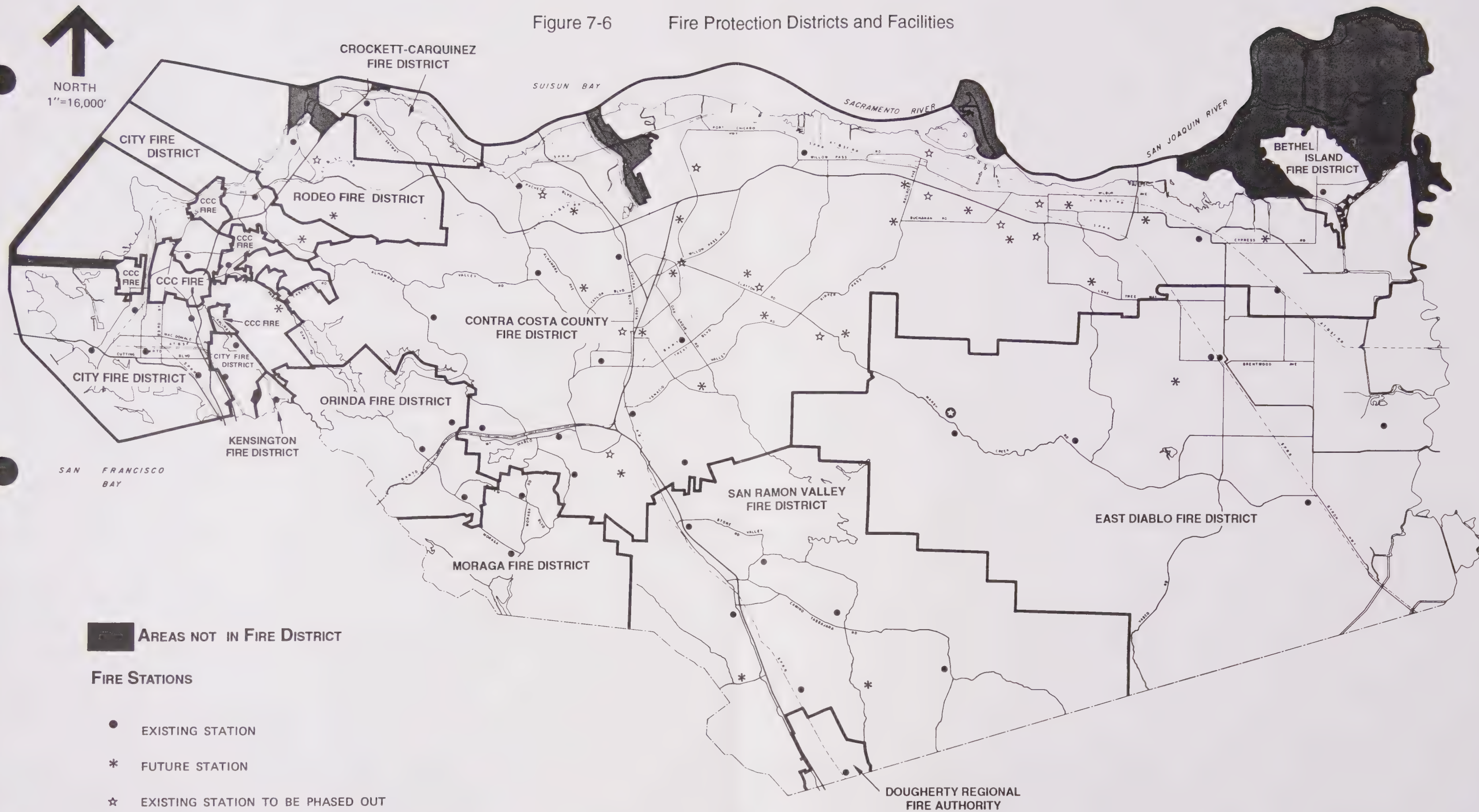
#### FIRE PROTECTION POLICIES

- 7-62. The County shall strive to reach a maximum running time of 3 minutes and/or 1.5 miles from the first-due station, and a minimum of 3 firefighters to be maintained in all central business district (CBD), urban and suburban areas. (These areas are defined in Section 4).
- 7-63. The County shall strive to achieve a total response time (dispatch plus running and set-up time) of five minutes in CBD, urban and suburban areas for 90 percent of all emergency responses.
- 7-64. New development shall pay its fair share of costs for new fire protection facilities and services.
- 7-65. Needed upgrades to fire facilities and equipment shall be identified as part of project environmental review and area planning activities, in order to reduce fire risk and improve emergency response in the County.

- 7-66. Sprinkler systems may be required in new residential structures, where necessary to protect health, safety and welfare.
- 7-67. Consolidation of fire fighting agencies shall be considered where such reorganization will present the opportunity for enhanced level of service and/or lowered costs.
- 7-68. Factors such as response times and distance, call volume and type, population, fire flow requirements, land use, development density and valuation, and access shall be considered when evaluating proposed station locations.
- 7-69. The factors identified in the policy above shall also be used when considering conversion from volunteer to part-paid to full-paid service.
- 7-70. The effectiveness of existing and proposed fire protection facilities shall be maximized by incorporating analysis of optimum fire and emergency service access into circulation system design.
- 7-71. A set of special fire protection and prevention requirements shall be developed for inclusion in development standards applied to hillside, open space, and rural area development.
- 7-72. Special fire protection measures shall be required in high risk uses (e.g. mid-rise and high-rise buildings, and those developments in which hazardous materials are used and/or stored) as conditions of approval or else be available by the district prior to approval.
- 7-73. Fire fighting equipment access shall be provided to open space areas in accordance with the Fire Protection Code and to all future development in accordance with Fire Access Standards.
- 7-74. All new traffic signals shall be equipped with preemptive devices for emergency response services. Existing traffic signals significantly impacted by new development shall be retrofitted with preemptive devices.
- 7-75. Fire stations and facilities shall be considered consistent with all land use designations used in the General Plan and all zoning districts.
- 7-76. The architectural design and landscaping of new fire stations shall be complementary with surrounding land uses.
- 7-77. Fire stations shall be located and designed so as to minimize operating costs and maximize service standards in the area they serve.
- 7-78. Interim fire protection provisions using temporary and relocatable stations shall be considered to meet immediate, existing service needs until such time as permanent stations can be established.
- 7-79. Local fire agencies shall be encouraged to identify and monitor uses involving the handling and storage of hazardous materials.
- 7-80. Wildland fire prevention activities and programs such as controlled burning, fuel removal, establishment of fire roads, fuel breaks and water supply, shall be encouraged to reduce wildland fire hazards.



## Fire Protection Districts and Facilities



### Intergovernmental Coordination

- 7-av. The County Building Inspection Department and Community Development Department shall submit building and development plans for all new construction, including remodeling, to the local fire protection agency to assure that fire safety and control features are included that meet the adopted codes and ordinances of that agency.
- 7-aw. Maintain mutual aid agreements among fire protection agencies throughout the County.

### Five-Year Plans

- 7-ax. Periodically review and, if necessary, revise five-year plans for fire protection agencies receiving fire facilities fees.

### Special Ordinances

- 7-ay. Modify the County Sprinkler Ordinance to be consistent with General Plan policies in this section.
- 7-az. Develop special fire protection and prevention requirements for hillside, open space, and rural area development.

### Financing

- 7-ba. Continue to levy fire facility fees for new development in unincorporated areas, in accordance with five-year plans.
- 7-bb. Consider establishment of benefit assessment districts for fire protection purposes. In areas where operating shortfalls will result from increased service requirements related to new growth or the new service standards, the County should establish and/or increase fees generated from the benefit assessment districts.
- 7-bc. Establish a master agreement allowing fire protection agencies to continue to receive tax revenue increases in redevelopment areas, in order to allow agencies to plan for future service needs and financing in these areas.

## **7.11 SOLID WASTE MANAGEMENT**

### **INTRODUCTION**

The California Legislature recently enacted a comprehensive revision of the State's solid waste management planning process, known generally as AB 939, the California Integrated Waste Management Act of 1989 (CIWMA). Among other things, this Act established a new, integrated waste management planning process whereby cities and counties must achieve adopted waste diversion goals for source reduction recycling and



composting programs. Specifically, each county must prepare and adopt a County-wide Integrated Waste Management Plan (CoIWMP) to replace its existing County Solid Waste Management Plan (CoSWMP), as discussed below. In addition, the Act established an "Integrated Waste Management Hierarchy," a State policy requiring that waste management practices have the following order of priority: source reduction, recycling and composting, environmentally safe transformation (incineration) and environmentally safe landfill disposal.

The CoIWMP must include a source Reduction and Recycling Element prepared and adopted by each city within a county, as well as by each county for the unincorporated areas therein; these elements must identify the means by which such local governments will divert from their waste streams 25 percent of the landfilled solid wastes by the year 1995, and 50 percent (or the maximum feasible amount) by the year 2000. The CoIWMP must also include a County-wide Siting Element which must identify existing or new facilities with sufficient disposal capacity for 15 years of the residual solid waste stream that is not reduced at the source, recycled, composted or transformed. The 1989 Act repeals the general provisions of prior law regarding CoSWMPs, but an existing CoSWMP can provide the basis for countywide landfill siting before a new CoIWMP is approved. Public Resources Code section 50000 (as enacted by Assembly Bill 2296 in 1990). Pursuant to section 50000, the County's CoSWMP may serve as the basis for permitting and siting of landfills.

The cities' Source Reduction and Recycling Elements are to be submitted to their respective counties by July 1, 1991; the counties must complete similar Elements by January 1, 1991. All such elements must be approved by the reconstituted CIWMB either before or together with the remainder of such counties' CoIWMP. The CoIWMP must first be approved by both the county board of supervisors and by a majority of cities within the county whose collective population constitutes a majority of those people living in the incorporated areas of that county. These plans must then be submitted for approval to the CIWMB on a priority schedule depending upon the amount of landfill capacity remaining within the submitting county. For counties with less than five years of remaining landfill capacity, as is the case for Contra Costa County, the CoIWMP must be submitted for approval by January 1, 1992.

As discussed above, although the County must adopt a CoIWMP under the 1989 Act, the County's 1989 CoSWMP can serve as authority for permitting and siting landfills until the CoIWMP is adopted. The 1989 CoSWMP represents the most recent comprehensive consideration of solid waste management planning within Contra Costa County.



These planning laws, along with new facility regulations by the Regional Water Quality Control Board and Bay Area Air Quality Management District, have resulted in a new era for solid waste management in the 1990s. Laws and regulations continuously change to strengthen environmental protection and to encourage and legislate waste minimization.

In Contra Costa County the private sector has traditionally been responsible for solid waste collection and disposal. Approximately 750,000 tons per year of solid waste is generated by residences, businesses and industries in the County. More detailed information regarding the source of these wastes is documented in the CoSWMP.

The role of government in solid waste management is one of planning, administration, and facility approval. Fourteen of the 18 cities and eight special districts franchise solid waste collection. This means that the cities and districts enter into franchise agreements with private collectors to provide for collection services. As mentioned previously, cities and the County are responsible for development of the CIWMP. Cities and counties also have land use approval over solid waste facilities located within their jurisdiction.

It is noted that all of the disposal facilities, as well as the collection services, are privately owned. As a result, the range of actions, including new facility applications, landfill expansions, waste stream diversions, and the use of landfills in other counties, requires private sector-initiated applications or agreements as well as government policy direction and approvals.

Presently, there are three separate landfill sites disbursed geographically throughout Contra Costa County, with one site serving West County, one serving Central and South County, and another serving East County. All of these sites have very limited capacity and will be closed in the near future. At this time, it is unknown where new landfill sites will ultimately be sited. Given new regulations and siting criteria, it is unlikely that landfills will be located near the urbanized shoreline areas of the County. However, solid waste transfer stations, processing facilities, and waste to energy projects may be located in urban/industrial areas due to the nature of these facilities.

#### Map of Solid Waste Facilities

As indicated in Figure 7-7, there are three existing landfills and one transfer station in the County. The GBF transfer station has recently become operational. Figure 7-7 also identifies potential locations of new sanitary landfills or transfer stations. In the June 1990 election, the voters rejected the Keller Canyon referendum and

approved the Keller Canyon General Plan amendment by approximately 55 percent to 45 percent. Following this plan, the Board of Supervisors approved a use permit for the Keller Canyon site in July, 1990.

In the interim, an initiative petition was submitted to prevent development of a landfill at Marsh Canyon. This initiative appeared on the November 1990 ballot as Measure E, and was rejected by a margin over 62 percent to less than 37 percent. The provisions of this Plan relating to the landfill sites reflect and implement the voters' decisions on these two ballot measures.

Note that a discussion, along with goals, policies, and implementation measures, regarding the management and disposal of hazardous wastes is included in the following "Hazardous Waste Management" section. Policies regarding the transport of hazardous wastes are included in the "Hazardous Land Uses" section of the Safety Element.

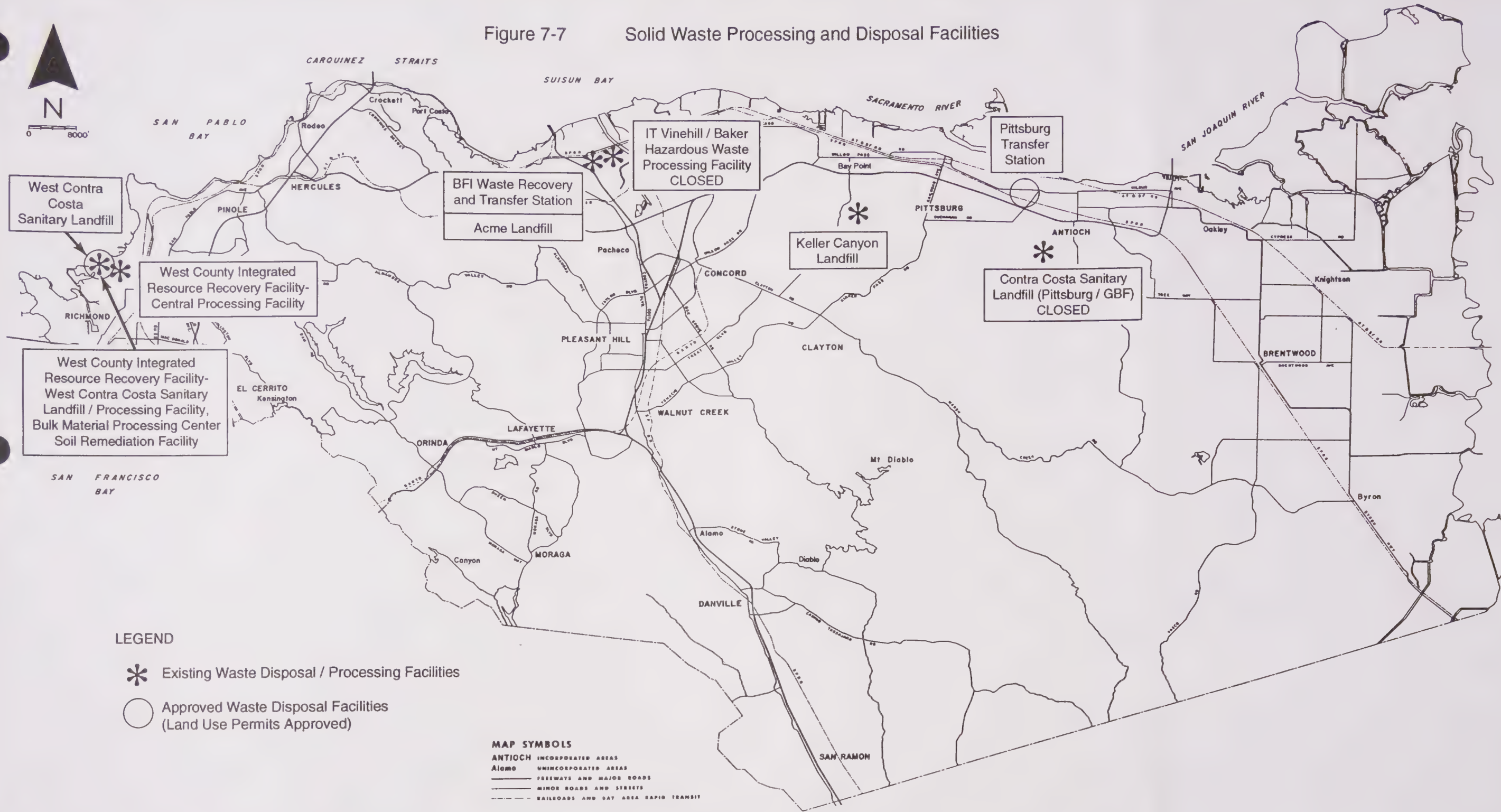
Materials recovery facility/transfer stations (MRF/TS) are recognized by the County to be instrumental in meeting the AB 939 diversion goals. These facilities, separately or in combination, can provide comprehensive materials recovery operations, efficient waste transfer operations, and household hazardous waste collection programs. In addition to the Acme Fill facility, two MRF/TS are proposed for inclusion in the County solid waste management system. Identified in the CoSWMP - the last public policy plan to be adopted by a majority of the cities/population in the cities in the County, and by the California Waste Management Board - these facilities are to be located in West and East County. The West County Integrated Resource Recovery Facility project, indicated in Figure 7-7, is recognized as the MRF/TS serving West County.

In order to provide adequate and effective solid waste disposal services in keeping with the growth management objectives of the General Plan, the following goals and policies were developed.





Figure 7-7 Solid Waste Processing and Disposal Facilities



CONTRA COSTA COUNTY  
CALIFORNIA



## SOLID WASTE MANAGEMENT GOALS

- 7-AE. To provide for the safe, efficient, and cost-effective removal of waste from residences, businesses, and industry.
- 7-AF. To provide adequate disposal capacity at landfills for the County's solid waste.
- 7-AG. To reduce the amount of waste disposed of in landfills by:
- 1) reducing the amount of solid waste generated (waste reduction);
  - 2) reusing as much of the solid waste as possible (recycling);
  - 3) utilizing the energy and nutrient value of the solid waste (waste to energy and composting); and
  - 4) to properly dispose of the remaining solid waste (landfill disposal).
- 7-AH. To divert as much waste as feasible from landfills through recovery and recycling.
- 7-AI. To assure the development of waste transfer, processing, and disposal facilities which satisfy the highest established environmental standards and regulations.
- 7-AJ. To minimize the potential impacts of waste collection, transportation, processing, and disposal facilities upon residential land uses.
- 7-AK. To provide for the safe and efficient handling of special wastes.

## SOLID WASTE MANAGEMENT POLICIES

- 7-87. The County shall maintain a leadership role in the development of solid waste disposal facilities in cooperation with private collection and disposal businesses, the cities, and other local and regional public agencies.
- 7-88. Solid waste disposal capacity shall be considered in County and city land use planning and permitting activities, along with other utility requirements, such as water and sewer service.
- 7-89. The planning and operation of solid waste management facilities shall be coordinated with adjoining counties and with the cities within the County.
- 7-90. The County shall assume a leadership role in the development of a comprehensive program for solid waste resource recovery in cooperation with private collection and disposal businesses and other local and regional public agencies.
- 7-91. Solid waste resource recovery (including recycling, composting, and waste to energy) shall be encouraged so as to extend the life of sanitary landfills, reduce the environmental impact of solid waste disposal, and to make use of a valuable resource, provided that specific resource recovery programs are economically and environmentally desirable.



- 7-92. Waste diversion from landfills due to resource recovery activities shall be subject to goals included in the County Solid Waste Management Plan. Public agencies and the private sector should strive to meet these aggressive goals.
- 7-93. As soon as practical, landfills shall be located within the boundaries of Contra Costa County to guarantee that the County's wastes can be disposed of without requiring approval of jurisdictions outside the County, to minimize transportation and disposal costs, to be responsible for the waste that is generated, and to ensure that County residents are not subject to waste import surcharges from other jurisdictions.
- 7-94. Contra Costa County should provide more than one landfill in the future to share the risk and impact of solid waste disposal as equitably as is practical, to reduce the risk of running out of landfill capacity, to minimize the distance that solid waste is hauled in the County, and to create competition in pricing to ensure fair disposal fees.
- 7-95. New landfills should each have a minimum capacity to handle half the County's total waste stream for at least 20 years. Siting efforts should continue until additional landfill capacity is available to handle all of the County's solid waste stream for a minimum of 50 years.
- 7-96. Landfills shall be located only on lands designated LF, and shall not be located on other lands (existing landfills may continue to operate under their previous authorizations). LF lands may be located within or surrounded by open space lands. New sanitary landfill sites (other than Keller Canyon which is designated in this Plan) shall not be located in designated environmentally sensitive areas. Such new landfill sites shall not be located within any area designated for open space uses unless the landfill operation is adequately screened from view along roadways.
- 7-97. New waste disposal facilities shall be located to minimize potential impacts upon existing and future residents. Waste disposal and processing facilities shall be designed, developed, and operated in a manner that is compatible with surrounding land uses.
- 7-98. Solid waste disposal sites shall be designed and operated to provide useful sites after completion of disposal operations. Re-use of sites for outdoor recreation and open space, where feasible, shall be encouraged.
- 7-99. Traffic at landfills and transportation costs shall be reduced through the use of transfer stations.
- 7-100. The general public (in cars and small trucks) shall be restricted from direct access to landfills; instead, these types of vehicles shall be directed to transfer stations. The need for transfer stations shall be based on economics, the need to mitigate traffic impacts, and the need to inspect refuse for hazardous materials and recyclables.
- 7-101. Transportation routes to transfer stations and landfills shall be included as conditions of approval in permits for the facilities, in order to identify preferred access routes which reduce traffic impacts on communities adjacent to and along the access routes.
- 7-102. Solid waste hauling on collectors and local streets through residential areas should be avoided.
- 7-103. Applications to establish solid waste facilities shall be required to adopt General Plan amendments in order to achieve consistency with existing plans, to implement on-site and/or off-site compensatory

measures for loss of existing site land use, and to implement mitigation measures identified in project-specific EIR's.

## SOLID WASTE MANAGEMENT IMPLEMENTATION MEASURES

### Solid Waste Management Plan

- 7-bd. Ensure that solid waste activities in Contra Costa County are carried out in accordance with the Solid Waste Management Plan and are coordinated with other jurisdictions.
- 7-be. Utilize and update the County's Solid Waste Management Plan as the principal planning document for solid waste management in the County, and ensure that its policies are based upon the population projections and geographic distributions set forth in the Land Use Element of this General Plan.
- 7-bf. Encourage cities and districts to prepare recycling/composting plans to show how they intend to help meet the goals included in the County Solid Waste Management Plan. Provide guidance and information to cities in meeting this requirement.

### Review and Inspection of Facilities

- 7-bg. To ensure the health and safety of the public, inspect solid waste facilities and equipment on a regular basis.
- 7-bh. Review, and amend if necessary, the Zoning Ordinance and other code sections, to ensure that waste disposal facilities are regulated to preclude all nuisance and unsightly conditions.
- 7-bi. Review land use permits for solid waste facilities at least every five years to determine if any modifications to specified conditions need to be made, to ensure that the facility is operated in an environmentally sound manner consistent with the best technology available and to ensure that the facility will remain compatible with adjacent land uses.
- 7-bj. Require that all proposed solid waste management facilities comply with California Code of Regulations Title 23, Chapter 3, Subchapter 15 requirements (Subchapter 15); comply with applicable fire district and permitting agency approval of an applicant-submitted Fire Control Plan; comply with Bay Area Air Quality Management District requirements; and comply with County requirements regarding household hazardous waste programs.
- 7-bk. Require that all proposed solid waste management facilities manage truck traffic to minimize peak-hour trips; up grade and improve identified pavement sections of roadway; limit facility hours of operation; manage access routes to facilities; and require mufflers on trucks and equipment.
- 7-bl. Require compliance of solid waste facilities with regulatory and permitting agencies, including the Bay Area Air Quality Management District and the County, to reduce impacts from landfill gas generation, waste-to-energy facility air emissions and dust emissions to an insignificant level.
- 7-bm. Require that all proposed solid waste management facilities include the following conditions of approval for a facility Land Use Permit and other regulatory requirements: prepare and adopt an



appropriate leachate collection and recovery system, and an approved erosion control and drainage plan.

- 7-bn. Require all proposed solid waste management facilities to prepare geotechnical studies, including stability analysis, during site-specific environmental review. These studies shall determine the final engineering design of solid waste facilities and become mitigation measures which are incorporated into the land use permit conditions of approval for a site.
- 7-bo. Require compliance by landfills with Subchapter 15 Class II requirements, including minimum vertical separation between landfill and groundwater, installation of a low permeability clay liner and/or a plastic liner, a subdrain system, and a leachate control and removal system, in order to help mitigate impacts on surface and groundwater where such measures are deemed necessary by the Board of Supervisors during application review.

#### Development Review Process

- 7-bp. Review and amend existing ordinances and procedures to ensure that the review and approval of development applications is carried out in accordance with the applicable goals, policies, and implementation measures included in the Solid Waste Management Plan.
- 7-bq. When landfills are proposed, ensure that the need for transfer stations is identified consistent with the criteria in the County Solid Waste Management Plan.
- 7-br. Require that conditions of approval for transfer stations and landfills identify preferred access routes.
- 7-bs. Utilize the capacity criteria included in the County Solid Waste Management Plan when reviewing applications for new solid waste landfills, as well as the preference to have more than one landfill within the County.
- 7-bt. Require proposed solid waste management facilities to reduce visual impacts of any facility by implementing appropriate mitigation measures, such as installing visual berms; limiting the area of landfill activities; planning temporary and permanent vegetation to match existing visual character and screen operations; covering refuse daily (or more frequently); erection of fencing; and collecting litter.
- 7-bu. Require all proposed solid waste facilities to comply with the archaeological resource protection policies of the County General Plan. If a historic site is discovered during construction of a facility, work would cease allowing for a site evaluation by an historic archaeologist and, if warranted, a data recovery phase to be initiated. If significant known sites are encountered before construction begins, the applicant shall be required to develop and implement a plan, in conjunction with an archaeologist, to reduce potential impacts to archaeological resources to less-than-significant levels.
- 7-bv. Require a wetland and/or other habitat enhancement plan be developed and implemented by the landfill applicant in conjunction with the appropriate resource management agencies. At a minimum, this plan should provide for an acre-for-acre or unit-for-unit replacement for lost significant habitat.
- 7-bw. To partially mitigate topographic impact, the site developer will be required to submit a grading plan that is designed to blend the landfilled area with the surrounding topography. Additional site-specific mitigation measures, including visual screening, may be included in the project-level tiered EIR.



## 7.12 HAZARDOUS WASTE MANAGEMENT

### INTRODUCTION

In response to the growing concern for the need to plan for the effective management of hazardous waste so that the protection of public health and safety and the environment is ensured, the California Legislature enacted a law which authorized counties and regional council of governments to prepare Hazardous Waste Management Plans. The intent of this law was to establish a comprehensive planning process in which State and local governments, the public, environmental groups, and industry jointly develop safe and effective solutions for the management and disposal of hazardous waste. The Contra Costa County Hazardous Waste Management Plan, prepared pursuant to State law, is a comprehensive analysis of all aspects of hazardous waste management from generation through disposal.

Contra Costa County, which historically has been an industrialized county, is one of the largest generators of hazardous waste in the State. Businesses generating the majority of the County's estimated 425,000 annual tons of hazardous waste are located along the industrial waterfront rim of the County. Two-thirds of the hazardous waste generated within the County is treated on the site where it is created, with the remaining one-third transported by truck or rail to commercial hazardous waste management facilities.

With the closure of the International Technology Class I hazardous waste disposal facility, all hazardous wastes which require commercial treatment or disposal, approximately 161,000 tons per year, are shipped out of the County. One of the primary goals of the County Hazardous Waste Management Plan is to determine and provide for the capacity of commercial hazardous waste management facilities that will be needed through the year 2000, to enable the County to manage the hazardous wastes that it produces.

Historically, the burden of providing commercial hazardous waste facilities for the State has been placed upon the four counties, one of which was Contra Costa, in which the Class I hazardous waste management facilities were located. One of the guiding principles in the development of the county plans is that each county should provide the necessary commercial hazardous waste management facilities to meet their needs, so that the burden is equally distributed throughout the State and the nation.

Providing for the fair-share distribution of facilities throughout the State and ensuring that California has adequate facilities to manage its needs can be accomplished by implementing the "fair-share" policy outlined in this section.

The Contra Costa County Hazardous Waste Management Program is established to ensure the safe and responsible management of hazardous waste within the County. This program is based on the following "hierarchy of waste management policies." The intent of the plan is to manage hazardous wastes by emphasizing the first policy as the primary determinant; if a course of action based upon the first policy is proven to be unfeasible, the second, third, fourth, and fifth policies shall be followed in that order. The hierarchy is as follows:

- o reduction of the use of hazardous substances and the generation of hazardous waste at their source;
- o recovering and recycling of the remaining waste for reuse;
- o treatment of those wastes not amenable to source reduction or recycling so that the environment and community health are not threatened by their ultimate disposal;
- o increase of those wastes amenable to this technology; and
- o proper disposal of treated residuals in approved residual repositories (disposal facilities such as Class I landfills).

The focus of the County's hazardous waste management strategy is to reduce the waste that is generated and to facilitate businesses to utilize waste management methods that are "higher" on the waste management hierarchy of policies.

The County Hazardous Waste Management Plan will be the primary planning document for hazardous waste management within the unincorporated areas of the County and within the 18 cities. The County Hazardous Waste Management Plan is incorporated, by reference, into the County General Plan. The Plan establishes goals and policies for the safe management of hazardous waste, and recommends the establishment of a variety of programs designed to manage more effectively the hazardous waste produced and to reduce by 30 to 40 percent the hazardous waste generated, using 1984 as a base from which to measure. The Plan also sets forth siting criteria that will be used to determine whether a proposed commercial hazardous waste management facility may be located within the County.

Note that goals, policies and implementation measures involving the transportation of hazardous materials, as well as buffering requirements to be applied to certain hazardous land uses in the County, are found in the "Hazardous Land Uses" section of the Safety Element. Readers should refer to both of these sections in the General Plan to determine policies that affect all types of hazardous uses or materials.

As shown on Figure 7-8, the majority of the commercial hazardous waste treatment and transfer facilities located in Contra Costa County are now closed. The California Advanced Environmental Technology Corporation Facility and the Erickson Transfer Treatment Facility which has received necessary permits for conservation are the only facilities permitted for commercial hazardous waste management.

To assure adequate disposal of hazardous substances for the planning period, the following goals and policies were developed.

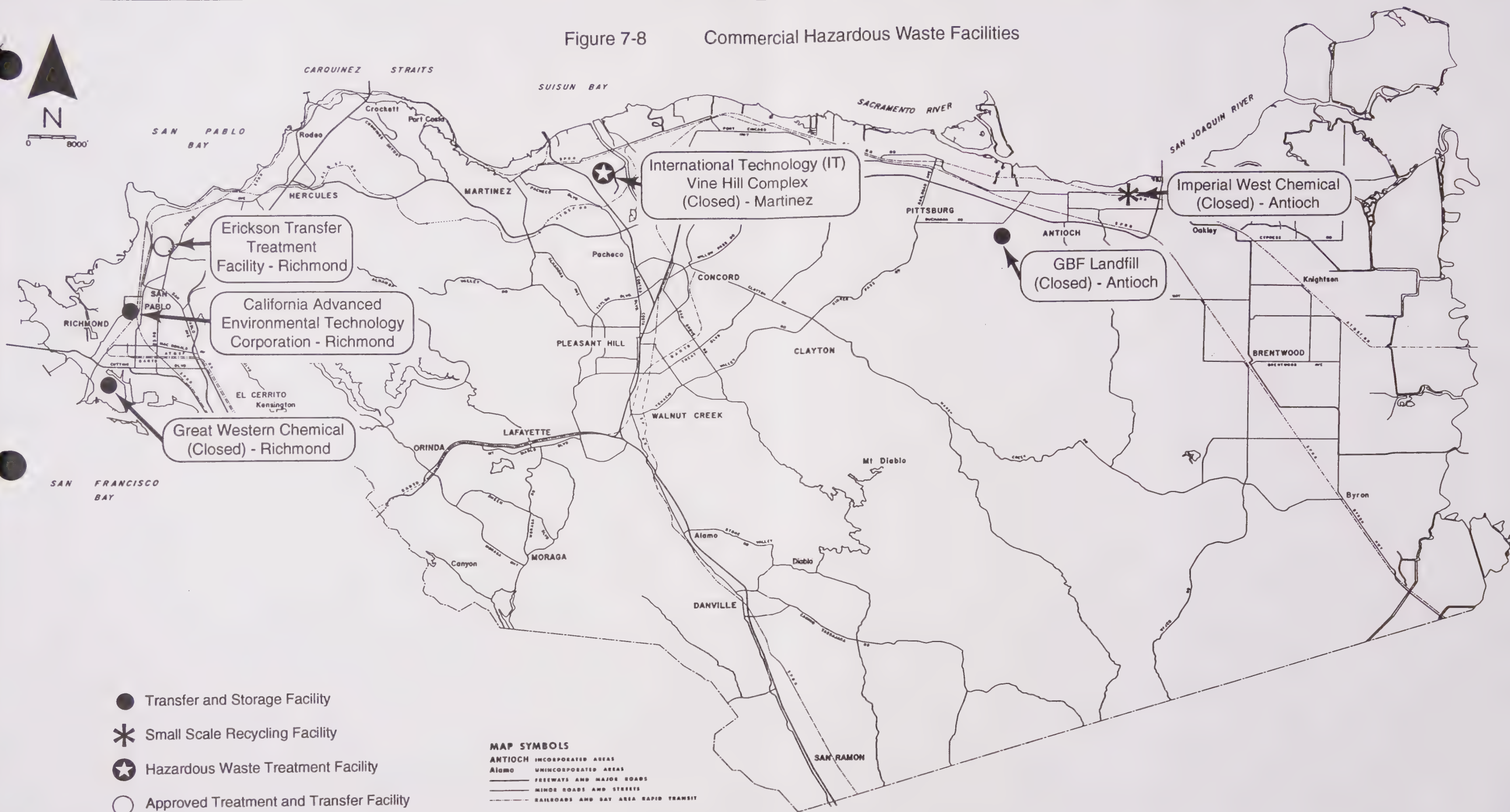
#### HAZARDOUS WASTE MANAGEMENT GOALS

- 7-AL. To manage the hazardous wastes that Contra Costa County produces by determining and providing for the capacity of commercial hazardous waste management facilities that will be needed in the future.
- 7-AM. To eliminate the generation and disposal of hazardous waste materials to the maximum extent feasible, by:
- 1) reducing the use of hazardous substances and the generation of hazardous waste at their source;
  - 2) recovering and recycling the remaining waste for reuse;
  - 3) treating those wastes not amenable to source reduction or recycling so that the environment and community health are not threatened by their ultimate disposal;
  - 4) incinerating those wastes amenable to this technology; and
  - 5) properly disposing of treated residuals in approved residual repositories.
- 7-AN. To minimize the need for additional and/or replacement hazardous waste disposal sites.





Figure 7-8 Commercial Hazardous Waste Facilities



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**HAZARDOUS WASTE MANAGEMENT POLICIES**

- 7-104. The County shall follow the "hierarchy of hazardous waste management goals" above by emphasizing the first goal (reducing waste at the source) as the primary determinant; if a course of action based upon the first goal is proven to be unfeasible, the second, third, fourth and fifth goals shall be followed in that order.
- 7-105. The County shall actively support the development of alternative technologies and methodologies of hazardous waste management which demonstrate a reduction in relative risk to human health and the environment.
- 7-106. A hazardous waste transfer station should be available in West, East and North Central County.
- 7-107. Contra Costa County will accept its fair share of hazardous waste management facilities to serve the local area, region and State.
- 7-108. The siting of hazardous waste management facilities necessary to meet the County's needs shall be encouraged within Contra Costa County, according to the "Hazardous Waste Management Planning and Siting Principle," identified in the HWMP (refer to p. III-1 of the HWMP). To be sited off-site hazardous waste management facilities must be consistent with the HWMP (which includes the Hazardous Waste Management Planning and Siting Principle; siting criteria; and hazardous waste policies), as well as the criteria presented in the following policies.
- 7-109. Facilities shall be designed to minimize risk to neighbors in the case of an accident or spill of hazardous wastes. All facilities shall be required to adopt an emergency response plan which includes immediate notification of the public in case of an emergency.
- 7-110. To the degree necessary to protect human health and the environment and based on a risk assessment or environmental document, off-site commercial hazardous waste management facilities with similar general treatment methods, as defined in the County Hazardous Waste Management Plan, should not be concentrated in the same area of the County.
- 7-111. Emergency services, available 24 hours a day, shall be available for the life of the facility and should be a condition of land use approval. Water and sewer services should be available to all hazardous waste facilities. Residual repositories, which may be located in more remote areas, may provide these public services on a self-sufficient basis. Transfer and storage facilities that may be located in remote areas may also provide these services on a self-sufficient basis. Since treatment facilities will be located in industrial areas, it is assumed that water, sewer and emergency services are readily available. If these services are not available, the project proposal should specifically state how these services will be provided.
- 7-112. Hazardous waste management facilities should be located so as to minimize any additional noise impacts on the surrounding area.
- 7-113. All hazardous waste management facilities shall be located in areas where access roads leading to major transportation routes (e.g. arterials, freeways, or expressways) do not pass through residential neighborhoods, where residential frontage is minimized, is buffered, or has physical barriers, and where road networks are demonstrated to be relatively safe with regard to road design, construction, accident rates, and traffic flow. This policy does not apply to facilities solely dedicated to the collection and transfer of household hazardous waste.

- 7-114. Residual repositories shall be prohibited within areas known or suspected to be supplying principle recharge to a regional aquifer, or within areas that utilize a residential well system, as defined in the adopted general, regional or state plans. Treatment-type facilities should be discouraged from being located in such areas. If treatment-type facilities are located in these areas, facilities must provide properly engineered spill containment features, inspection measures, and other environmental protection controls.
  
- 7-115. Hazardous waste facilities shall not be located within the watershed of drinking water reservoirs or proposed drinking water reservoirs shown in the County or a City's General Plan.
  
- 7-116. Facilities located within areas with unstable soils shall have engineered design features to assure structural stability. This category includes steep slopes and areas subject to liquefaction and subsidence due to natural causes.
  
- 7-117. Facilities shall not be located in wetlands, such as saltwater, freshwater and brackish marshes, swamps and bogs inundated by surface or groundwater with a frequency to support, under normal circumstances, a prevalence of vegetative or aquatic life which requires saturated soil conditions for growth and reproduction as defined in the adopted general, regional and State plans. The health risk assessment and environmental impact reports prepared for hazardous waste management facilities shall consider the need for buffer zones to separate the facility from environmentally sensitive land uses such as wetlands and critical habitat areas.
  
- 7-118. A buffer zone of 2,000 feet is required for residual repositories based on the requirement in the Health and Safety Code, Section 25202.5(b)(d), unless the owner proves to the satisfaction of the State Department of Health Services that a 2,000-foot buffer zone is not required to protect public health and safety. A larger buffer zone may be required for residual repositories based on risk assessments and the environmental impact report for the project.

For treatment-type facilities, risk assessments shall be made when permitting a facility. This assessment will consider the physical and chemical characteristics of the specific types of waste that will be handled, the design features of the facility, and any need for buffering residential or other sensitive areas from adverse emissions or contamination. Additional buffer zone requirements may be identified by the environmental impact report.

- 7-119. Risk assessments performed and completed during the permitting process, shall be used to determine the need for buffer zones between all proposed hazardous waste facilities and immobile populations. The risk assessment will consider the physical and chemical characteristics of the specific types of waste which will be handled, the design features of the facility and the proximity to immobile populations. Immobile populations include schools, hospitals, convalescent homes, prisons, facilities for the mentally ill, etc.
  
- 7-120. The accelerated clean-up of contaminated sites, including containment of the sites as quickly as possible, shall be supported, commensurate with minimizing the risk to the environment and to public health.
  
- 7-121. Health risk screening, as required by the Bay Area Air Quality Management District or other regulatory agencies, shall be completed for all proposed hazardous waste facilities. Health risk assessments shall be prepared if determined as necessary by the health risk screening. Risk assessment analysis should include the cumulative impacts of other hazardous waste management facilities in the general area, as well as other sources of pollutants which are present in the general



area. The risk assessment and environmental impact report should address health and environmental risks and impacts including acute and chronic health risks, risk to major transportation corridors and impacts from catastrophic events. If a hazardous waste incinerator is proposed a health risk assessment should be required.

- 7-122. Facilities near rivers, streams, creeks, lakes, etc. must have engineered structural design features to ensure that mitigation of waste will not occur (e.g., spill containment and monitoring devices).
- 7-123. The health risk assessment and environmental impact reports for hazardous waste facilities shall consider the need for buffer zones to separate the facility from environmentally sensitive land uses such as wetlands and critical habitat areas.
- 7-124. If mitigation of air quality impacts take the form of offsets, the offsets obtained shall be from sources as near to the proposed facility as possible.
- 7-125. For all facilities, road networks leading to major transportation routes should be demonstrated to be safe with regard to road design and construction, accident rates, excessive traffic, etc. For residual repositories, it is preferable to have good access to major transportation routes. These facilities may be more distant from waste generation sites than other types of facilities because of their need for larger land areas. Treatment facilities should be located so as to minimize distances to major transportation routes that are designed to accommodate heavy vehicles.
- 7-126. Land use permits for hazardous waste facilities shall be subject to periodic review to determine if any modifications to specified conditions need to be made. This will help to ensure that the facility is operated in an environmentally sound manner consistent with the best technology available to the industry, and that it will remain compatible with adjacent land uses.
- 7-127. No hazardous waste facility should be sited so as to preclude extraction of minerals necessary to sustain the economy of the State.
- 7-128. Public hazardous waste facilities shall not be located on military lands.
- 7-129. Hazardous waste management facilities shall not be located in recreational, cultural or aesthetic areas.
- 7-130. Treatment facilities should be located close to the waste generation sources to minimize the risks associated with transportation. Residual repositories may be located more distant from waste generation sources than treatment-type facilities because of their need for larger land area.
- 7-131. Facilities shall not be located within two hundred feet (200) of any active or recently active fault (California Administrative Code, Title 22, Section 66391) or a fault considered important in the Seismic Safety Element of the Contra Costa General Plan. A greater setback may be required based on information from an environmental impact report.
- 7-132. Residual repositories shall not be located in areas subject to 100-year flood events. This is a requirement of the Code of Federal Regulations (Title 40, Section 264.18(b)), and of the California Administrative Code (Title 22, Section 66391(a) (11)(b)). Treatment facilities may be built in areas subject to 100-year flooding if protected by engineered solutions (such as berms, raising above flood levels, etc.) and if they meet all other flood protection requirements, including consideration of the expected future rise in sea level. Access roads leading to hazardous waste facilities shall be protected from 100-year flood events.



- 7-133. Facilities shall not be located within critical habitat areas, as defined in the adopted general, regional or State plans. The health risk assessment and environmental impact reports prepared for hazardous waste facilities shall consider the need for buffer zones to separate the facility from environmentally sensitive land uses such as wetlands and critical habitat areas.
- 7-134. Residual repositories must conform to the requirements of the State Water Resources Control Board as stated in Sub-Chapter 15 of Title 23 of the California Code of Regulations. For treatment-type facilities, all above-ground facilities must have engineered structural design features, common to other types of industrial facilities. This includes spill containment and monitoring devices.
- 7-135. The siting of facilities should not be precluded from Non-Attainment Air Areas unless risk assessments performed as part of the permitting process, which consider the physical and chemical characteristics of the specific types of waste that will be handled and the design features of the facility, show that emissions will significantly contribute to the non-attainment of standards, that such emissions cannot be mitigated and that emissions from such facilities are significantly greater than those associated with the transportation of hazardous waste out of the area.

Facilities may be established within Prevention of Significant Deterioration areas unless an analysis for a proposed facility shows that air emissions cannot be adequately mitigated.

- 7-136. Prime Agricultural Lands, under California Law, may not be used for urban purposes (including hazardous waste facilities), unless an overriding public need is serviced. When siting hazardous waste management facilities in these areas, overriding public service needs must be demonstrated.
- 7-137. Residual repositories shall meet the depth to groundwater siting requirements of the State Water Resources Control Board as stated in Sub-Chapter 15 of Title 23 of the California Code of Regulations. Treatment facilities may be located in high groundwater areas if the engineered design of the containment structure is capable of withstanding failure because of geologic or soil failures which may arise.
- 7-138. Potential adverse impacts which could occur because of the proximity of hazardous waste facilities to places where large numbers of people may gather shall be determined as part of the risk assessment conducted in the permitting process. The risk assessment shall consider the physical and chemical characteristics of the waste that will be handled and the design features of the facility.
- 7-139. Treatment-type facilities shall only be sited in areas designated for industrial (heavy and light) use in the General Plan of the agency with local land use jurisdiction (the County or a City). If a treatment-type facility is proposed in a non-industrial area, a General Plan Amendment will be necessary to re-designate the property as industrial (or designation substantially equivalent to industrial) or a special designation for hazardous waste facilities in order to be consistent with the Hazardous Waste Management Plan.

## HAZARDOUS WASTE MANAGEMENT IMPLEMENTATION MEASURES

### Hazardous Waste Management Plan

- 7-bx. Establish a coordinated program of public awareness and public education for the implementation of the County Hazardous Waste Management Plan, especially for the siting of the needed new hazardous waste management facilities.

### Development Review Process

- 7-by. Review and amend ordinances and procedures to ensure that the review and approval of development applications is carried out in accordance with the applicable goals, policies, and implementation measures included in the Hazardous Waste Management Plan.
- 7-bz. Require a site specific transportation analysis for each hazardous waste facility proposed within Contra Costa County, and request an analysis for projects proposed in adjacent counties, to determine how localized traffic and safety impacts can be mitigated.

### New Ordinances and Programs

- 7-ca. Prepare and adopt an ordinance that would require businesses to submit to the County plans for waste minimization, as well as hazardous waste generation, treatment and disposal reports currently sent to other regulatory agencies.
- 7-cb. Establish a Waste Minimization and Small Business Generator program, which will provide direct assistance to businesses and industries to minimize waste generation.
- 7-cc. Establish a household Hazardous Waste Disposal program, which will provide ongoing collection sites for household hazardous wastes and will use a public education/awareness program to encourage the use of non-hazardous products.
- 7-cd. Establish a comprehensive Public Education program, which should include a school curriculum program, an elected officials program, and a media program to create a better understanding of hazardous waste management issues throughout the County.
- 7-ce. Develop a program to inventory information on contaminated sites, which will allow the County Health Services Department to advise local Planning Departments on the need to restrict or control land uses in the vicinity of these sites.
- 7-cf. Prepare and adopt an ordinance which would require the formation of Citizen Communication and Information panels for new commercial hazardous waste facilities and would encourage the establishment of these panels for existing facilities. The intent of these panels is to establish and maintain communication between the facility and the local community.
- 7-cg. As data is derived from generator programs administered by the County Health Services Department, establish additional policies or programs, as needed, to assist the small generators in effectively reducing and managing their hazardous waste.

### Intergovernmental Coordination

- 7-ch. Work diligently with other counties, regional governments and the State to ensure that the fair share concept will provide the needed hazardous waste management facilities throughout the State.
- 7-ci. Request that the County Hazardous Materials Commission review local regulatory programs to ensure coordination of regulatory activities.
- 7-cj. Request the State Department of Health Services to develop a program to provide counties with import/export data necessary to meet inter-county information sharing requirements.
- 7-ck. Lobby with the State, the Federal government and the private sector, to encourage changes in product development, labeling, packaging and handling to reduce the amount of household hazardous waste that is generated.
- 7-cl. Encourage local law enforcement agencies and the California Highway Patrol to increase inspections of hazardous waste/materials carriers.

## **7.13 SCHOOLS**

### **INTRODUCTION**

The provision of adequate school facilities and an effective education program is necessary to the long range economic health and vitality of the County. The financing and implementation of school facilities is shared by the State, local school boards, and the Contra Costa County Community College District.

Although the State of California has preempted the field of provision of school facilities through exactions on development projects, it is the responsibility of local government to ensure that the timing of growth is coordinated with the efforts of the school districts to provide school facilities. For this reason, the Contra Costa County General Plan addresses the provision of school facilities. It is well recognized in California that all children have a right to equal access to quality educational opportunities. It is therefore appropriate that the County General Plan address the changing needs for educational facilities generated by the growth in population envisioned by this plan.

Private schools also exist in the County which provide an alternative to public schools for those that can afford this option. Such institutions add vitality to the overall educational community.



### Map of School Facilities

There are 18 school districts and one community college district in the County as indicated in Figure 7-9. Figure 7-9 also indicates sites for proposed new schools. Information was gathered from the individual school districts which are autonomous and prepare their own district facilities plans. The information is incomplete because not all districts have made long term plans for new schools but, instead, take part in planning for new developments when they occur. However, this General Plan is designed to accommodate, through the growth management and land use review process the new school sites as proposed by each district.

Currently, overcrowded attendance areas have been identified in many school districts in the County. For example, in the East County area of Oakley, where much of the unincorporated growth will occur, schools are presently severely overcrowded. Adoption of the General Plan will increase existing overcrowding in the schools substantially. In order to accommodate the projected population growth in the Plan and achieve State-adopted standards in the provision of school facilities in all areas in the County, the following goals policies and implementation measures were developed.

### SCHOOLS GOALS

- 7-AO. To assure the provision of adequate primary, secondary, and college facilities in the County.
- 7-AP. To provide new schools in optimal locations to serve planned growth.
- 7-AQ. To encourage the efficient multi-purpose uses of school facilities.
- 7-AR. To assure that primary and secondary school facilities are adequate or committed to be adequate, prior to approvals of major applications for residential growth.
- 7-AS. To maximize the use of existing educational resources and school facilities.
- 7-AT. To assure that school districts are seeking and receiving their fair share of state and/or federal funds for school facilities.

### SCHOOLS POLICIES

- 7-140. The environmental review process shall be utilized to monitor the ability of area schools to serve development.

(Refer to Implementation Measure #7-CT)

- 7-141 To the extent possible, new residential development General Plan Amendments or Rezonings shall, in the absence of the Planning Agency's satisfaction that there are overriding considerations (e.g.

provision of low or moderate cost housing), be required to adequately mitigate impacts on primary and secondary school facilities.

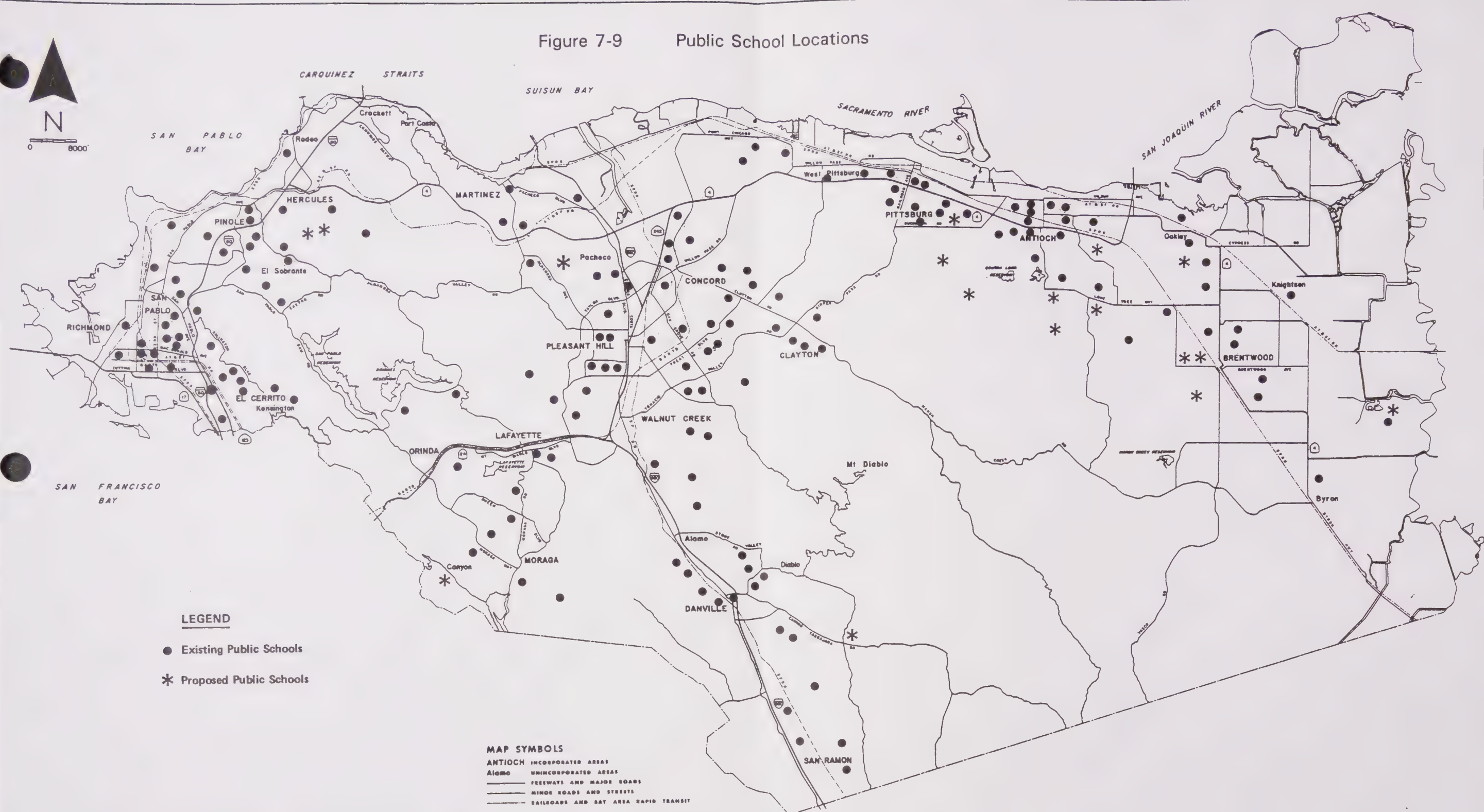
- 7-142. The development of quality schools shall be supported by coordinating development review with local school districts including such activities as designating school sites, obtaining dedications of school sites, and supporting local fees, special taxes, and bond issues intended for school construction.
- 7-143. The hearing body in reviewing residential projects shall consider the availability of educational facility capacity.
- 7-144. School site donation by developers shall be encouraged through the use of density transfer or other appropriate land use alternatives.
- 7-145. To the extent possible, the development of school facilities shall be provided in conjunction with and adjacent to local parks and trailways.
- 7-146. Adequate provision of schools and other public facilities and services shall be assisted by coordinating review of new development with school districts the cities and other service providers through the Growth Management Program (see Chapter IV), the environmental review process, and other means.
- 7-147. The County shall support efforts to enhance the Hayward State branch state college on the Ygnacio Valley site.
- 7-148. The County shall support efforts to build a new community college in the South County.
- 7-149. The County expects that all growth impacted school districts, where appropriate, shall actively pursue state and/or Federal funds for school facilities.
- 7-150. School Districts shall demonstrate, in the school facility plan, efficient utilization of its facilities. The school facility plan shall consider scheduling alternatives, use of relocatable facilities and boundary adjustments.

#### SCHOOLS IMPLEMENTATION MEASURES

- 7-cm. Revise the County CEQA Guidelines to require that the impacts of proposed new developments on school districts be identified.
- 7-cn. Lobby for State financing of new schools within the County.
- 7-co. To the extent allowable under State law, specify in the County's list(s) and criteria for development entitlement application's determination of completeness procedure, that a development entitlement application is not complete unless it contains satisfactory written evidence that any involved school district has been advised of and provided with the proposed application and requested to provide its recommendations thereon to the applicant and the County planning agency.



Figure 7-9 Public School Locations



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CALIFORNIA**





- 7-cp. In concert with the school districts, prepare an education facilities plan amendment to this General Plan which recommends locations for future school facilities.
- 7-cq. Work with the interested school districts to ensure that new development contributes, to the extent allowable under State law, its fair and full share of the cost of additional facilities which are necessary, irrespective of jurisdictional boundaries.
- 7-cr. The procedure provided in School Implementation Measure 7-cp. is to be applied in those school districts indicating to the County their current concern about education facilities and desire to participate in the development entitlement review process. Upon the receipt of any such indication, the involved and interested school district shall be appropriately designated in the planning agency's notification and contacts list for development entitlement applications pending in the district's area.
- 7-cs. To the extent allowable under State law, specify in the County's list(s) and criteria for development entitlement application's determination of completeness procedure, that a development entitlement application for a Rezoning or a General Plan Amendment is not complete unless it contains an identification of the number of residential units which will be subject to school facility mitigation. All residential units except senior housing, housing for very low-income households, studio and one-bedroom units shall be included.
- 7-ct. Develop, in conjunction with interested school districts and residential developers, the content and format of district facility information which will be used to identify the impact of a proposed residential project on the district and possible appropriate facility mitigation. The facility information shall utilize state classroom size standards as a basis for determining the adequacy of area schools. The facility information should include consideration of district reorganization of boundaries to the extent possible.
- 7-cu. To the extent allowable under State Law, specify in the County's list(s) and criteria for development entitlement application's determination of completeness procedure, that a residential development General Plan Amendment or Rezoning application is not complete unless it indicates the manner in which adequate mitigation for primary and secondary school facilities needed to serve children generated by the new development is proposed to be provided.
- 7-cv. The procedures provided in School Implementation Measures 7-cp, 7-cs, 7-ct and 7-cu are to be applied to those school district who notify the County that they may have inadequate facilities to handle additional residential development and who provide both evidence of diligent participation in all state and/or Federal funding programs for school facilities and sufficient district facility information so that the County may determine the impact of a proposed residential project on a district and determine any appropriate facility mitigation.

## 7.14 CHILDCARE

### INTRODUCTION

The concept of childcare is based upon the premise that children need and have a right to a safe, healthy and caring environment. In response to the changing characteristics of the Country's workforce, the government has begun funding childcare programs.

The continued interest of both men and women in maintaining employment, the need for two-income households to meet the increasing cost of living—particularly for housing costs in the County—and the growing number of single-parent households, urgently require government assistance in providing for the needs of children through childcare programs and facilities. Such programs and facilities must be able to accommodate the variety of ages and interests of children throughout the County.

Currently in the County, an imbalance exists between the location of facilities and the areas of greatest need. Users of childcare services have expectations as to the quality of those services which may not be matched by individual childcare operator's performances. Additionally, the issue of affordability of services is important to a substantial portion of the County's population, because it can place limitations on the childcare services available to them. When these issues are coupled with the difficulty of locating childcare services within some residential areas and with the anticipated growth and development of the County, the need for expanded childcare program becomes apparent.

In order to provide for adequate childcare for current and future residents of the County, the following goals and policies were developed.

#### CHILDCARE GOALS

- 7-AS. To assist and encourage the development of adequate, affordable and quality childcare in Contra Costa County.
- 7-AT. To maximize parental choice for childcare options in the community.

#### CHILDCARE POLICIES

- 7-151. The development of high quality childcare and preschool facilities shall be encouraged in appropriate locations, especially in conjunction with schools, church facilities and centers of concentrated employment such as business parks.
- 7-152. Childcare and preschool facilities shall be consistent with residential and commercial land use designations where safe vehicular access and effective buffering of neighboring residences can be achieved.
- 7-153. Proposed development projects shall be required to provide for childcare and preschool facilities in accordance with the General Plan and applicable ordinances, when significant demand for these facilities is created by the projects.
- 7-154. Proposed commercial and residential projects which do not directly provide childcare or preschool facilities shall be required to comply with the provisions of the adopted childcare ordinance.



- 7-155. In order to increase parental choice, the location of childcare facilities shall be encouraged in residential neighborhoods, employment centers, at school sites, hospitals, religious facilities, parks and along transit routes.
- 7-156. Temporary childcare facilities should be allowed as a management tool for the efficient and timely development of permanent facilities.
- 7-157. The County shall encourage and participate in efforts to coordinate childcare programs and fund raising efforts to meet childcare needs throughout the County, through the establishment of the county-wide childcare organization, as recommended by the Childcare Task Force.
- 7-158. The County shall foster public awareness of the variety of needs and availability of resources for childcare.
- 7-159. The County shall review and amend childcare regulations and the permitting process in order to simplify them, minimize fees and shorten the approval process.
- 7-160. The County shall encourage parents, providers, public officials and employers to participate in the planning and decision making processes related to providing childcare facilities.

#### CHILDCARE IMPLEMENTATION MEASURES

- 7-cw. Support programs which foster public awareness of the variety of needs and availability of resources for childcare.
- 7-cx. Review the County Zoning Ordinance and other ordinances to ensure that requirements for childcare and preschool facilities, churches, and other similar land uses are consistent with the policies above.

#### 7.15 HOMELESS SERVICES AND FACILITIES GOALS

- 7-cy. To encourage, if possible, the development of homeless shelters and support services in the County.

#### HOMELESS FACILITIES/SERVICES POLICIES

- 7-cz. Proposed developers' projects may be encouraged by the County to contribute to County homeless shelters.

#### 7.16 OTHER PUBLIC FACILITIES

#### INTRODUCTION

The provision of governmental services requires a broad range of governmental facilities, beyond those already discussed, to serve the needs of the County. Uses range from civic centers, governmental offices, post offices, libraries, hospitals, and detention facilities, to corporation yards and meeting halls.

Since it may be impractical to designate specific locations for such facilities in advance of land acquisition on the Land Use Element Plan map, it is necessary to allow such uses throughout the County without regard to underlying General Plan designation. Later plan amendments will re-designate these sites to the Public/Semi-Public category. They can also be constructed without regard to the underlying zoning.

Some facilities (generally not those in the Growth Management Element) are provided in response to perceived needs and don't have specific standards associated with them. For libraries, however, standards are known and specified in the policies section below. Public buildings will be provided in accordance with the growth management policies of this Plan.

#### Map of Public Buildings

Figure 7-10 shows existing public buildings in the unincorporated areas of the County.

In order to provide public buildings for the future needs of the projected population in accordance with the General Plan, the following goals and policies were developed.

#### OTHER PUBLIC FACILITIES GOALS

7-AU. To assure that high quality civic, medical, and other community facilities are provided to meet the broad range of needs within unincorporated areas of the County.

#### OTHER PUBLIC FACILITIES POLICIES

- 7-161. The needs of existing and future residents of the County for public assembly and meeting space shall be evaluated. The availability of adequate public space shall be assured through coordinated actions of existing service providers.
- 7-162. When developing new general purpose public facilities, a balance between social, cultural, and recreational needs of the community being served shall be sought.
- 7-163. Services provide by the County Library System shall be maintained and improved by providing adequate funding for ongoing operations, and by providing new library facilities to meet the needs of County residents, particularly in growing areas where library service standards are not being met.
- 7-164. Sites of public institutions shall be developed in a manner which buffers the public use impacts from the adjacent lands uses to the extent feasible.
- 7-165. The development of facilities and services to serve the needs of the elderly within the community shall be encouraged.

- 7-166. Churches and other religious institutions shall be considered consistent with residential and commercial land use designations where safe vehicular access and effective buffering of neighboring residences can be achieved.

#### OTHER PUBLIC FACILITIES IMPLEMENTATION MEASURES

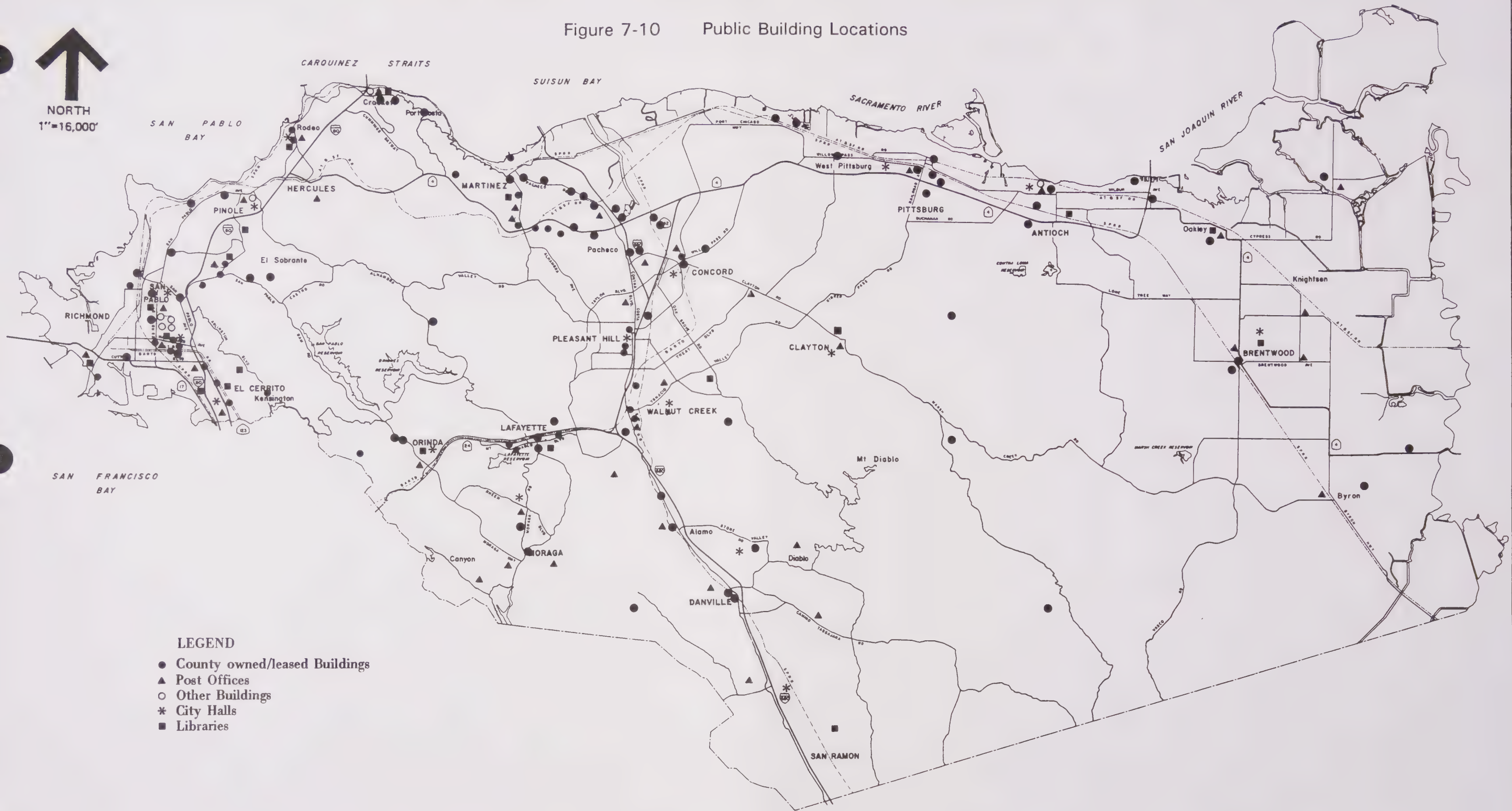
##### Development Review Process

- 7-da. Utilize the Mandatory Referral process (Section 65402 of the Government Code) to determine if public land acquisitions, sale or building of new structures, are in conformity with the General Plan.
- 7-db. Pursue a full range of fiscal methods to finance needed public facilities.
- 7-dc. Where appropriate, encourage the establishment of specialized on-site libraries in business parks and other types of development.





Figure 7-10 Public Building Locations



# CONTRA COSTA COUNTY CALIFORNIA









## 8. CONSERVATION ELEMENT

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## 8. CONSERVATION ELEMENT

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### 8.1 INTRODUCTION

Contra Costa County encompasses a large geographic area and harbors an abundance of vegetative, water, air, biotic, and agricultural resources. The natural environment of the County also includes mineral, oil, gas, and wind energy resources. Many of the issues surrounding these resources are complexly interrelated. Water and air quality, for example, are essential both to the health of people and wildlife habitats. Several of the County's natural resources also provide substantial economic return for its incorporated and unincorporated areas.

This element of the Contra Costa County General Plan is concerned with issues regarding the identification, preservation and management of natural resources in the unincorporated County. Important uses of these resources are summarized, and an evaluation of the issues surrounding the protection of the resource is discussed. Finally, goals and policies developed for resource protection are presented.

A key component of Measure C - 1990 is the preservation of at least 65 percent of the land in the County for agriculture, open space, wetlands, parks and other non-urban uses. The 65/35 Land Preservation Standard, the urban limit line concepts and the preservation of agricultural resources policies of Measure C - 1990 work together with other goals, policies, and implementation measures in this conservation element.

### LEGAL AUTHORITY

The chapter covers the issues required to be addressed under California's State General Plan laws. Section 65302 (d) of the California Government Code requires the County to adopt a Conservation Element as part of the General Plan, for the purposes of conservation, development, and utilization of natural resources including waters, harbors, fisheries, wildlife, minerals and other natural resources. State General Plan Guidelines prepared by the Governor's Office of Planning & Research advise that the Conservation Element should promote "the protection, maintenance, and use of natural resources, prevent the wasteful exploitation,

destruction and neglect of natural resources, and recognize that natural resources must be maintained for their ecological value as well as for their direct benefits to people." Many of the issues covered in the Conservation Element directly overlap those required in the Open Space, Public Facilities, Land Use, and Safety Elements. All sections are cross-referenced as applicable.

As in the case of all other elements of the General Plan, the Conservation Element has equal legal status with all other sections of the plan.

## **8.2 RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS**

### **EXISTING DOCUMENTS**

#### Other Chapters of the Updated General Plan

The Conservation Element of the General Plan provides policies to protect natural resources and their uses. While this chapter discusses various uses and preservation of natural resources, it does not designate land uses (see the Land Use Element 3.0 for land use designations). While this chapter discusses water quality and quantity, it does not discuss water supply (refer to the chapter on Water Supply in 7.0). Furthermore, scenic resources, recreational lands, historic and cultural resources are addressed under the Open Space Element of the General Plan.

## **8.3 RELATIONSHIP TO OTHER GENERAL PLAN DOCUMENTS**

The goals, policies and implementation measures contained in this element are intended to guide planning for public and private projects that are subject either to approval of the County planning agency, or to review by County staff, although they may be under the jurisdiction of other public agencies operating in the County. Such goals, policies and implementation measures are intended to accord and have equal legal status with the other elements of the General Plan.

## **8.4 CONSERVATION ELEMENT ORGANIZATION**

This chapter of the General Plan is divided into eight sections that present background information, policies, maps, and implementation measures regarding:

- o vegetation and wildlife, including important trees, natural vegetation, wildlife habitat, significant ecological resources;
- o agricultural resources;



- o renewable energy resources including commercial wind farms, energy recovery and solar projects;
- o mineral resource areas;
- o soil resource areas, including agricultural soils;
- o oil and gas resources;
- o water resources, including urban and rural creeks;
- o harbors; and
- o air resources.

## 8.5 OVERALL GOALS AND POLICIES REGARDING RESOURCE CONSERVATION

The following goals and policies are overall statements regarding the need to preserve and efficiently manage open space and other resources in the County. More detailed policies particular to each type of resource are then discussed under separate topic sections in the remainder of the element.

### OVERALL CONSERVATION GOALS

- 8-A. To preserve and protect the ecological resources of the County.
- 8-B. To conserve the natural resources of the County through control of the direction, extent and timing of urban growth.
- 8-C. To achieve a balance of uses of the County's natural and developed resources to meet the social and economic needs of the County's residents.

### OVERALL CONSERVATION POLICIES

- 8-1. Resource utilization and development shall be planned within a framework of maintaining a healthy and attractive environment.
- 8-2. Areas that are highly suited to prime agricultural production shall be protected and preserved for agriculture and standards for protecting the viability of agricultural land shall be established.
- 8-3. Watersheds, natural waterways, and areas important for the maintenance of natural vegetation and wildlife populations shall be preserved and enhanced.
- 8-4. Areas designated for open space/agricultural uses shall not be considered as a reserve for urban uses and the 65 percent standard for non-urban uses must not be violated.
- 8-5. In order to reduce adverse impacts on agricultural and environmental values, and to reduce urban costs to taxpayers, scattered urban development in outlying areas shall be precluded outside the ULL.

## 8.6 VEGETATION AND WILDLIFE

### INTRODUCTION

The County has a diverse range of habitats and unique species. Much of the County's natural environment remains while substantial areas have already received permanent public protection. There are additional resources which warrant similar public control. The vast majority of privately held lands supporting vegetation and wildlife resources are found within the agricultural areas of the County. Agriculturalists and biological habitats have co-existed for decades in Contra Costa County; thus privately preserving resources with public benefit.

The topographic variety of the County, from the summit of Mount Diablo to the San Francisco Bay/Delta estuary complex, combines to form the setting for its range of habitat and wildlife.

In addition to the naturally occurring habitats in the County, suburban communities attract their own assemblage of wildlife. In these areas, the lush shrub and tree plantings of backyard gardens function as a partial substitute for natural scrub and woodland habitats. For example, black-tailed deer occur in gardens and yards during late summer and early fall months.

There are unique biotic resources found within Contra Costa County which have biological and wildlife importance. While most of the significant habitat areas are found in unincorporated locations, several important wildlife areas are within city limits. Wetlands are one of the most important habitat resources within the County. Wetlands, especially marshes scattered along the County's shoreline, have been awarded substantial legal and policy protection. For purposes of this plan, wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year.

### MAPS AND INVENTORY OF SIGNIFICANT ECOLOGICAL RESOURCE AREAS

The most significant ecological resource areas in Contra Costa County are defined by three separate categories: (1) areas containing rare, threatened and endangered species; (2) unique natural areas; and (3) wetlands and marshes.

These three categories overlap somewhat, since some of the most significant and unique biological resource areas in Contra Costa County also include habitats for rare, threatened and endangered animal or plant species. The most important unique natural areas in the County - habitats of rare, threatened and endangered species, and wetland areas - are inventoried and briefly described in Table 8-1. The generalized locations of each area are shown on Figure 8-1. The Community Development Department maintains more detailed maps of these areas in their offices.

The animal and plant species that have been designated as "rare," "endangered," or "threatened" by either the State of California or the Federal government, and which are known to occur in Contra Costa County are listed in Table 8-2. Information regarding the known and inferred habitats of some of these rare, threatened and endangered species is included in Figure 8-1.

An "endangered species" is one which is in danger of extinction throughout all or a significant portion of its range. A "threatened species" is one which is likely to become an endangered species within the foreseeable future. In 1986 California dropped the "rare" designation in favor of the term "threatened" when referring to animal species. However, the State has retained the term "rare" to define plant species which may soon become threatened if their habitat situation worsens.



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TABLE 8-1  
INVENTORY OF SIGNIFICANT ECOLOGICAL RESOURCE AREAS  
OF CONTRA COSTA COUNTY

1. Point Pinole

Tidal and freshwater marshes, mudflat, grassland, eucalyptus plantation, and fishing pier which extends 1/4 mile into San Pablo Bay. Valuable for migrating waterfowl and shorebirds. Habitat for soft-haired bird's beak, California clapper rail and salt marsh harvest mouse, possibly for black rail, Samuel's song sparrow and black-shouldered kite. Plantation serves as resting place for migrating monarch butterflies.

2. San Pablo Creek and Wildcat Creek Marshes

Tidal marsh and mudflat. Potential for same species as described for Point Pinole.

3. Brooks Island

Tidal marsh, scrub/brushland and coastal prairie grassland. Important stop for migrating waterfowl including Canada goose. Supports a population of California vole with an uncommon pelage (hair) color variation.

4. Hoffman Marsh

Tidal marsh habitat for migrating waterfowl and shorebirds, possibly for California clapper rail and salt marsh harvest mouse.

5. San Pablo Ridge

The grassland areas on clay and clay loam soils on San Pablo Ridge support a population of Santa Cruz Tarweed which was transplanted from a hillside in Pinole.

6. Wildcat Creek Canyon

Grassy hillsides with riparian woodland along Wildcat Creek. Habitat for ornate shrew, western pond turtle, northern brown skink and possibly for Alameda whipsnake.

7. Lone Tree Point

Stratified cliff face demonstrates the underlying trend of coastal uplift. Fossiliferous strata contain many marine-life fossils such as clams and oysters.

8. Sobrante Ridge Manzanita Grove

A unique "island" stand of chaparral that supports two and possibly three species of manzanita, including the Alameda manzanita.

TABLE 8-1 (Continued)

9. Siesta Valley

Broadleaf evergreen forest, riparian woodland, grassland and scrub/brushland. Habitat for Alameda whipsnake, Berkeley kangaroo rat, northern brown skink, grasshopper sparrow and ornate shrew. Readily observed geologic features include a faulted syncline with Siesta Formation outcropping in the fold and Moraga basalt forming the upper slopes of the valley. Some fossils of shells and land mammals.

10. Huckleberry Botanic Regional Preserve

Chaparral and broadleaf evergreen forest in this 130 acre preserve supports Alameda manzanita, western leatherwood and diverse avifauna.

11. Redwood Regional Park

Fine example of coast redwood forest. Redwoods were extensively logged in the late 1800s; all existing trees are second-growth.

12. Flicker Ridge

Concentration of many habitats: grassland, native grassland, scrub/brushland, chaparral, open oak woodland, broadleaf evergreen forest, knobcone pine forest and agriculture. Includes patches of unique pygmy redwoods, stunted due largely to exposure and soil conditions.

13. Briones Hills

Grasslands, oak woodland, riparian, and creeks support Mount Diablo fairy lantern, newts, western pond turtle, northern brown skink, ornate shrew, prairie falcon, mountain lion and possibly Alameda whipsnake, grasshopper sparrow, golden eagle, badger, ringtail and bobcat. Mount Diablo fairy lantern and Diablo helianthella are known and suspected to occur here, respectively.

14. Shoreline Between Martinez Waterfront and Concord Naval Weapons Station

Tidal marsh supports salt marsh harvest mouse, California clapper rail and possibly black rail. Ornate shrew, black-shouldered kite and Suisun song sparrow also occur here.

15. Lime Ridge

Supports Mt. Diablo manzanita, and a buckwheat subspecies which is endemic to Lime Ridge.

16. Shell Ridge

Open oak woodland and grasslands. Upturned geologic strata contain many marine fossils.

TABLE 8-1 (Continued)

17. Las Trampas and Rocky Ridges

Large area of rugged terrain, high ridges and steep slopes. Grassland, scrub/brushland, chaparral, rock outcrops, open oak woodland, broadleaf evergreen forest, and riparian woodland. Habitat for Alameda whipsnake, black-chinned sparrow, prairie falcon, golden eagle, ringtail, badger, bobcat and mountain lion.

18. Blackhawk Ranch Fossil Locality

Upturned fossiliferous Pliocene strata indicates past climate, flora and fauna. Diverse fossils include those of streamside trees, marine invertebrates, lizards, cranes, small mammals, carnivores, peccaries, camels, horses and mastodons. Site was the edge of a salt water basin that extended inland to the Sierra Nevada.

19. Mt. Diablo

Native grassland, serpentine chaparral, large rock outcrops, riparian woodland, dwarfed woodland, Coulter pine forest, knobcone pine forest, and springs. Many rare, endangered, depleted or otherwise unusual plants and animals, including an isolated population of northern sagebrush lizard, inhabit the mountain.

20. Nortonville - Somersville

Northernmost limit of Coulter pine and black sage, southernmost limit of common manzanita. Mount Diablo manzanita, Diablo rock rose and Brewer's dwarf flax. Grassland, chaparral, open oak woodland and Coulter pine forest. Area has been heavily mined for coal.

21. Bay Point Salt Marsh

This marsh area is a habitat for salt marsh harvest mouse and the California black rail.

22. Entrapment Zone

The entrapment zone is an area where suspended materials concentrate as a result of mixing by the outgoing freshwater flow above the saltwater wedge. Plankton concentrations are influenced by the location of the entrapment zone, and this in turn affects the location and productivity of fish in the bays and Delta. The location of the entrapment zone between the lower Delta and Suisun Bay varies according to the strength and phase of the tides, and the level of freshwater inflow from the Sacramento and San Joaquin Rivers.

23. Browns Island and Winter Island

Freshwater and estuarine marshes. Habitat for Contra Costa wallflower, Mason's lilaeopsis, Suisun song sparrow, black-shouldered kite and possibly river otter. Black rail might also occur here.



TABLE 8-1 (Continued)

24. Mouth of Contra Costa Canal

Salt water marsh provides habitat for black-shouldered kite.

25. Antioch Sand Dunes

Small and only remaining remnants of riverine dunes, once part of the largest river-laid dunes in the state that stretched ten miles along the southern shore of the San Joaquin River. The remaining dunes support rare and/or endangered plants, at least six endangered and/or endemic insects and the California legless lizard.

26. Los Vaqueros

This area contains fair densities of native bunchgrasses.

27. Big Break

This is an emergent marsh supporting the California black rail.

28. Marsh Creek Riparian Corridor and Marsh Creek Reservoir

These areas provide habitat for a variety of sensitive plant and animal species including: large-flowered fiddleneck, Hoover cryptantha, Mt. Diablo buckwheat, diamond-petaled California poppy, stink bells, Diablo rock-rose, caper-fruited tropidocarpum, San Joaquin kit fox, California tiger salamander, California red-legged frog and molestan blister beetle.

29. Alkali Meadows and Northern Claypan Vernal Pools

Rare habitats in Contra Costa County and statewide. A specialized flora and invertebrate fauna are adapted to each habitat.

30. Los Vaqueros

Area of biological importance because of the presence of historical eagle nests and other outstanding natural features. This area provides habitat for the following species: San Joaquin kit fox, Alameda whipsnake, tricolored blackbird, California red-legged frog, California tiger salamander, western pond turtle, freshwater shrimp. Also contains Alkali Meadows and Northern Claypan Vernal Pools, both of which are considered to be rare statewide.

31. Bethel Island Wetlands

The Bethel Island planning area supports approximately 741.5 acres of seasonal and permanent wetlands. Another approximately 940 acres of ruderal wetland/upland are found on the planning area. These have high values as biological habitat and are considered critical natural resources by the U.S. Army Corps of Engineers and other resource agencies.

TABLE 8-1 (Continued)

32. Little Franks Tract

This freshwater marsh habitat contains riparian shrub-brush along the levees which supports black-crowned night heron.

33. Franks Tract

A flooded, formerly levee-encircled delta island. Freshwater marsh and riparian woodland habitats on borders, delta aquatic habitat with good spawning area for fish (striped bass, largemouth bass, white catfish, others). Possible habitat for giant garter snake.

34. Sand Mound Slough

This area is an example of habitat found on the tule islands in the central and southern Delta. This area contains tules, bulrushes, common reed, rushes and other marsh vegetation as well as riparian vegetation which provides a valuable habitat for wintering ducks and other waterfowl.

35. Connection Slough, Quimby Island, Rhode Island, Old River Complex

A diverse mix of upland habitat, agricultural lands, riparian trees and shrub-brush, marsh and tule islands. Excellent wildlife habitat, particularly for raptors, songbirds, and game species. These areas support the rare California hibiscus.

36. South Bank of Rock Slough

This area supports a small population of the Suisun marsh aster and California hibiscus.

37. Indian Slough

California hibiscus is found at the confluence of Indian Slough.

38. Byron Hot Springs

Alkali mud flats, salt marsh and hot mineral springs. A rare snail (*Helminthoglypta* spp.) inhabits the area, the site of an old resort-spa now in disrepair. A recently created shallow lake has enhanced the habitat for wildlife. The grassland hills to the west support San Joaquin kit fox.

39. Eucalyptus Island

A freshwater marsh subject to tidal fluctuation. This area supports a variety of wildlife and is the habitat of the California hibiscus.

TABLE 8-1 (Continued)

40. Mouth of Pinole Creek

This coastal salt marsh area supports California black rail.

41. Delta Islands and Peninsula

Additional delta islands in Contra Costa include Jersey Island, Bradford Island and Webb Tract. Veale Tract, which is a peninsula off the mainland, has similar habitat. The undeveloped shoreline and interior sections of these islands and peninsula have the potential for supporting the same species as described for Browns and Bethel Islands and the Frank Tracts.

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TABLE 8-2  
PROTECTED AND UNCOMMON PLANT AND WILDLIFE SPECIES  
OF CONTRA COSTA COUNTY<sup>1</sup>

| <u>Taxa</u>  | <u>Status</u> | <u>Reported Locations</u>   |
|--|---------------|---|
| <b>PLANTS</b>  |               |   |
| Large-flowered Fiddleneck<br><i>Amsinckia grandiflora</i>                        | CE/FE/1B      | Woodland and grasslands.  |
| Coast Rock Cress<br><i>Arabis blepharophylla</i>                                 | -/C3c/4       | West County: Red Rock.  |
| Mt. Diablo Manzanita<br><i>Arctostaphylos auriculata</i>                         | -/C3c/1B      | North Central County: Clayton and Antioch South quadrangles; San Ramon Valley: Diablo and Tassajara quadrangles.          |
| Alameda Manzanita<br><i>Arctostaphylos pallida</i>                               | CE/C2/1B      | West County: Richmond, Oakland East quadrangles; Sobrante Ridge, Tilden Regional Park, Huckleberry Botanic Regional Park. |
| Contra Costa Manzanita<br><i>Arctostaphylos pungens</i><br><i>ssp. laevigata</i> | -/-/3         | Chaparral.  |
| Suisun Marsh Aster<br><i>Aster chilensis</i> var. <i>lentus</i>                  | -/C2/1B       | East County: marshes bordering Honker Bay.  |
| Heart-leaved saltbush<br><i>Atriplex cordulata</i>                               | -/-/3         | Alkaline scrub.   |
| Mt. Diablo Fairy Lantern<br><i>Calochortus pulchellus</i>                        | -/-/4         | San Ramon Valley, Tassajara quadrangle; Morgan territory, Briones Regional Park.  |
| Oakland Star Tulip<br><i>Calochortus umbellatus</i>                              | -/-/4         | Chaparral, often serpentine.  |
| Chaparrel Harebell<br><i>Campanula exigua</i>                                    | -/-/4         | Chaparral.  |
| Serpentine Collomia<br><i>Collomia diversifolia</i>                              | -/-/4         | Serpentine chaparral.   |

TABLE 8-2 (Continued)

| <u>Taxa</u>   | <u>Status<sup>1</sup></u> | <u>Reported Locations</u>  |
|---|---------------------------|--|
| Soft Haired Bird's Beak<br><i>Cordylanthus mollis mollis</i>                    | CR/C1/1B                  | North Central County: Western edge of Hastings Slough near mouth, Honker Bay shoreline; Point Pinole.              |
| Birds-on-nest<br><i>Cordylanthus nidularius</i>                                 | CR/C2/1B                  | North Central County: Deer Flat, Mt. Diablo.   |
| Hoover's Cryptantha<br><i>Cryptantha hooveri</i>                                | -/-/4                     | Grassland.   |
| Hospital Canyon Larkspur<br><i>Delphinium californicum</i> ssp. <i>interius</i> | -/C2/3                    | Woodland.  |
| Recurved Larkspur<br><i>Delphinium recurvatum</i>                               | -/-/1B                    | Alkaline grasslands.   |
| Western Leatherwood<br><i>Dirca occidentalis</i>                                | -/C3c/4                   | West County: East Bay Hills, Briones Valley.   |
| Mt. Diablo Buckwheat<br><i>Eriogonum truncatum</i>                              | -/C2/1A                   | North-Central County: lower east slopes of Mt. Diablo and south quadrangle.  |
| Jepson's Woolly Sunflower<br><i>Eriophyllum jepsonii</i>                        | -/-/4                     | Northern coastal scrub.  |
| Contra Costa Wallflower<br><i>Erysimum capitatum</i> var. <i>angustatum</i>     | CE/FE/1B                  | North-East County: Brown's Island and Antioch Dunes. County includes designated critical habitat for this species. |
| Diamond-petaled Poppy<br><i>Eschscholzia rhombipetala</i>                       | -/C2/1B                   | Valley grasslands.   |
| Stinkbells<br><i>Fritillaria agrestis</i>                                       | -/C2/4                    | Woodland and grasslands.   |
| Fragrant White Fritillary<br><i>Fritillaria liliacea</i>                        | -/C2/1B                   | Clayton quadrangle, Mount Diablo foothills.  |
| Great Valley Gumplant<br><i>Grindelia camporum</i> var. <i>parviflora</i>       | -/-/4                     | Grasslands.  |

TABLE 8-2 (Continued)

| <u>Taxa</u>   | <u>Status</u> | <u>Reported Locations</u>  |
|---|---------------|--|
| Marsh Gumplant<br><i>Grindelia humilis</i>                      | -/-/4         | Salt marsh.  |
| Diablo Rock Rose<br><i>Helianthella castanea</i>                | -/C2/1B       | North Central County: Clayton, Antioch South, Diablo quadrangles; San Ramon Valley: Tassajara quadrangle.                  |
| Brewer's Dwarf Flax<br><i>Hesperolinon breweri</i>              | -/C2/1B       | North Central County: Clayton, Antioch South, Diablo quadrangles; San Ramon Valley: Tassajara quadrangles.                 |
| California Hibiscus<br><i>Hibiscus californicus</i>             | -/C2/1B       | East County: Clifton Court Forebay shore.  |
| Santa Cruz Tarplant<br><i>Holocarpha macradenia</i>             | CE/C1/1B      | West County: Richmond quadrangle. Wildcat Canyon Regional Park contains a relocated population.                            |
| Northern California Black Walnut<br><i>Juglans hindsii</i>      | -/C2/1B       | West County: Richmond quadrangle; North-Central County: Clayton, Antioch South, and Las Trampas Ridge quadrangles.         |
| Contra Costa Goldfields<br><i>Lasthenia conjugens</i>           | -/C2/1B       | Byron Hot Springs quadrangle.  |
| Delta Tule Pea<br><i>Lathyrus jepsonii</i> ssp. <i>jepsonii</i> | -/C2/1B       | North-Central County: Shores of Honker Bay and Antioch.  |
| Mason's Lilaeopsis<br><i>Lilaeopsis masonii</i>                 | CR/C2/1B      | North Central County: shoreline areas in Port Chicago, Point Edith Wildlife Area, Honker Bay, and Antioch, Brown's Island. |
| Showy Madia<br><i>Madia radiata</i>                             | -/-/3         | Woodland and grasslands.   |
| Hall's Bush Mallow<br><i>Malacothamnus hallii</i>               | -/-/4         | Chaparral.   |



TABLE 8-2 (Continued)

| <u>Taxa</u>   | <u>Status<sup>1</sup></u> | <u>Reported Locations</u>   |
|---|---------------------------|---|
| Antioch Dunes Evening Primrose<br><i>Oenothera delotides</i> var. <i>howellii</i> | CE/FE/1B                  | North-East County: Honker Bay shoreline, Antioch Dunes, Brentwood quadrangle. County includes designated critical habitat for this species. |
| Mt. Diablo Phacelia<br><i>Phacelia phacelioides</i>                               | -/C2/1B                   | Clayton and Diablo quadrangles.   |
| Valley Oak<br><i>Quercus lobata</i>   | -/-/4                     | Throughout County especially in foothill woodland.  |
| Lobb's Aquatic Buttercup<br><i>Ranunculus lobii</i>                               | -/-/4                     | Wet locations in woodland and grasslands.   |
| Straggly Gooseberry<br><i>Ribes divaricatum</i> var. <i>publiflorum</i>           | -/-/4                     | Broadleaf evergreen forest.   |
| Rock Sanicle<br><i>Sanicula saxatilis</i>   | CR/C2/1B                  | North-Central County: Clayton quadrangle.   |
| Mt. Diablo Jewel Flower<br><i>Streptanthus hispidus</i>                           | -/C2/1B                   | North-Central County: Clayton, Diablo quadrangles.  |
| Metcalf Canyon Jewel Flower<br><i>Streptanthus albidus</i> spp. <i>albidus</i>    | -/C2/1B                   | Serpentine grasslands.  |
| Uncommon Jewel Flower<br><i>Streptanthus albidus</i> spp. <i>peramoenus</i>       | -/-/1B                    | Serpentine chaparral.   |
| Mount Diablo Cottonweed<br><i>Stylocline amphibola</i>                            | -/-/4                     | Broadleaf evergreen forest.   |
| California Suaeda<br><i>Suaeda californica</i>                                    | -/-/3                     | Coastal salt marsh.   |
| Caper-fruited Tropidocarpum<br><i>Tropidocarpum capparideum</i>                   | -/C2/1A                   | North-Central County: Clayton quadrangles; East County: Byron Hot Springs, Clifton Court Forebay quadrangles.                               |

TABLE 8-2 (Continued)

| <u>Taxa</u>  | <u>Status<sup>1</sup></u> | <u>Reported Locations</u>  |
|--|---------------------------|--|
| <b>MAMMALS</b>   |                           |  |
| Tule Elk<br><i>Cervus elaphus nannodes</i>                         | -/-/-                     | Concord Naval Weapons Station.   |
| Berkeley Kangaroo Rat<br><i>Dipodomys heermanni berkeleyensis</i>  | -/-/-                     | Historic records from Briones Valley, Mount Diablo, Siesta Valley.                                     |
| San Pablo Vole<br><i>Microtus californicus sanpabloensis</i>       | -/C2/-                    | Salt marshes; Point Pinole, mouth of San Pablo and Wildcat Creeks.                                     |
| San Joaquin Pocket Mouse<br><i>Perognathus inornatus inornatus</i> | -/C2/-                    | Historical observations from Antioch South, Clayton quadrangles.                                       |
| Salt Marsh Harvest Mouse<br><i>Reithrodontomys raviventris</i>     | CE/FE/CFP                 | Tidal and nontidal marshes of Suisun and San Pablo Bays in the west and north-central County areas.    |
| San Joaquin Kit Fox<br><i>Vulpes macrotis mutica</i>               | CT/FE/-                   | Brentwood-Byron ranchland, lower eastern and southern Mt. Diablo slopes, northern Dougherty Road area. |
| <b>BIRDS</b>   |                           |  |
| Tricolored Blackbird<br><i>Agelaius tricolor</i>                   | -/C2/-                    | Freshwater marshes of the Central Valley; Los Vaqueros.  |
| Golden Eagle<br><i>Aquila chrysaetos</i>                           | - / - / S S C ,<br>CFP    | Open grasslands of east County; Briones Hills, Las Trampas and Rocky Ridge.                            |
| Short-eared Owl<br><i>Asio flammeus</i>                            | -/-/SSC                   | Wildcat Creek marsh.   |
| Burrowing Owl<br><i>Athene cunicularia</i>                         | -/-/SSC                   | Grasslands; west of Clifton Court Forebay.   |

TABLE 8-2 (Continued)

| <u>Taxa</u>  | <u>Status<sub>1</sub></u> | <u>Reported Locations</u>  |
|--|---------------------------|--|
| Aleutian Canada Goose<br><i>Branta canadensis leucopareia</i>          | -/FE/-                    | Upland grassland sites northwest of the San Pablo Reservoir dam, west County segment (winter months). Proposed for reclassification as threatened under Federal law. |
| Swainson's Hawk<br><i>Buteo swainsoni</i>                              | CT/C2/-                   | East County areas where large groves of oak or riparian woodland occur adjacent to grassland or agricultural fields.   |
| Northern Harrier<br><i>Circus cyaneus</i>                              | -/-/SSC                   | Marshes; Wildcat Creek.  |
| Black-shouldered Kite<br><i>Elanus caeruleus</i>                       | -/-/CFP                   | Antioch North quadrangle; Wildcat Creek marsh.   |
| Prairie Falcon<br><i>Falco mexicanus</i>                               | -/-/CSC                   | Briones Hills, Las Trampas and Rocky Ridge.  |
| American Peregrine Falcon<br><i>Falco peregrinus anatum</i>            | CE/FE/CFP                 | Occasional forager in uplands, rugged portions of the County.  |
| Greater Sandhill Crane<br><i>Grus canadensis tabida</i>                | CT/-/CFP                  | Grain fields adjacent to Delta water courses in eastern east County (winter period).   |
| California Black Rail<br><i>Laterallus jamaicensis coturniculus</i>    | CT/C2/CFP                 | Salt marsh communities in the north-central County.  |
| Suisun Song Sparrow<br><i>Melospiza melodia maxillaris</i>             | CCE/-/-                   | Brushy segments of inland salt marsh; segments in coastal north-central area.  |
| Samuel's Song Sparrow<br><i>Melospiza melodia samuelis</i>             | -/-/-                     | Possibly at Point Pinole marshes.  |
| Black-crowned Night Heron<br><i>Nycticorax nycticorax</i>              | -/-/-                     | Marshes; Little Franks Tract. Rookery sites should be protected.   |
| California Brown Pelican<br><i>Pelecanus occidentalis californicus</i> | CE/FE/CFP                 | Inshore waters of west County area.  |



TABLE 8-2 (Continued)

| <u>Taxa</u>  | <u>Status<sup>1</sup></u> | <u>Reported Locations</u>   |
|--|---------------------------|---|
| Double-crested Cormorant<br><i>Phalacrocorax auritus</i>               | -/-/SSC                   | Nesting colonies underneath Richmond-San Rafael bridge.   |
| California Clapper Rail<br><i>Rallus longirostris obsoletus</i>        | CE/FE/CFP                 | Tall, dense pickleweed salt marsh in the west and north-central County areas.                               |
| California Least Tern<br><i>Sterna antillarum browni</i>               | CE/FE/CFP                 | Feeds and rests along quiet inshore bay waters in the west County area.                                     |
| American Badger<br><i>Taxidea taxus</i>                                | -/-/SSC                   | Briones Hills, Las Trampas and Rocky Ridge.   |
| <b>REPTILES</b>  |                           |   |
| Alameda Whipsnake<br><i>Masticophis lateralis euryxanthus</i>          | CT/C2/                    | Chaparral and coastal scrub areas near water sources.   |
| <b>AMPHIBIANS</b>  |                           |   |
| California Tiger Salamander<br><i>Ambystoma tigrinum californiense</i> | -/C2/SSC                  | Freshwater pond sites and surrounding plant communities in the East County area; Marsh Creek, Los Vaqueros. |
| Red-legged Frog<br><i>Rana aurora draytoni</i>                         | -/C2/SSC                  | Freshwater ponds.   |
| Northern Sagebrush Lizard<br><i>Sceloporus graciosus graciosus</i>     | -/-/-                     | Isolated population on Mount Diablo.  |
| <b>FISH</b>  |                           |   |
| Delta Smelt<br><i>Hypomesus transpacificus</i>                         | CCE/C1/-                  | Migrates through San Pablo and Suisun Bays during spawning runs.  |

TABLE 8-2 (Continued)

| <u>Taxa</u>   | <u>Status<sup>1</sup></u> | <u>Reported Locations</u>  |
|---|---------------------------|--|
| Winter-run Chinook Salmon<br><i>Oncorhynchus tshawytscha</i>                  | E/PT/-                    | Migrates through San Pablo and Suisun Bays during spawning runs. Under federal law, emergency listing as threatened until November 28, 1990. |
| Sacramento Splittail<br><i>Pogonichthys macrolepidotus</i>                    | -/C2/-                    | Migrates through San Pablo and Suisun Bays during spawning runs.   |
| INVERTEBRATES   |                           |  |
| Antioch Dunes Anthicid Beetle<br><i>Anthicus antiochensis</i>                 | -/C2/-                    | Formerly from Antioch North quadrangle.  |
| Lange's Metalmark Butterfly<br><i>Apodemia mormo langei</i>                   | -/FT/-                    | Antioch Dune area, north-central County area.  |
| San Joaquin Dune Beetle<br><i>Coelus gracilis</i>                             | -/C2/-                    | Formerly from Antioch sand dunes.  |
| Antioch Corhuran Robberfly<br><i>Cophura hurdi</i>                            | -/C2/-                    | Historic observations from Antioch.  |
| Antioch Efferian Robberfly<br><i>Efferia antiochi</i>                         | -/C2/-                    | Historic observations from Antioch.  |
| Valley Elderberry Longhorn Beetle<br><i>Desmocerus californicus dimorphus</i> | -/FT/-                    | Willow riparian in east County which have stands of blue elderberry bushes.  |
| Redheaded Sphecid Wasp<br><i>Eucerceris ruficeps</i>                          | -/C2/-                    | Sand dunes; Antioch dunes, Bethel Island.  |
| Bay Checkerspot Butterfly<br><i>Euphydryas editha bayensis</i>                | -/FT/-                    | Morgan Territory area, east County; Antioch area, north-central County.  |
| San Francisco Tree Lupine Moth<br><i>Grapholita edwardsiana</i>               | -/C2/-                    | Host plant is <i>Lupinus arboreus</i> ; Point Richmond, Inspiration Point, formerly from Tilden Park.  |

TABLE 8-2 (Continued)

| <u>Taxa</u>  | <u>Status<sup>1</sup></u> | <u>Reported Locations</u>   |
|--|---------------------------|---|
| Durants snail<br><i>Haplotrema duranti</i>                         | -/-/-                     | Usually under moist dead leaves and rockpiles. Oakland East, Las Trampas Ridge, Briones Valley quadrangles.   |
| Snail<br><i>Helminthoglypta nickliniana bridgesi</i>               | -/C2/-                    | Historic observations from Berkeley Hills, San Pablo Creek, and Marsh Creek Canyon. Prefers rockpiles but sometimes occurs under grass and weeds on open hills. |
| Curved Foot Hygrotus Diving Beetle<br><i>Hygrotus curvipes</i>     | -/C2/-                    | Aquatic; historic observations from Oakley.   |
| Middlekaufs Shieldback Katydid<br><i>Idiostatus middlekaufi</i>    | -/C2/-                    | Antioch.  |
| Molestan Blister Beetle<br><i>Lytta molesta</i>                    | -/C2/-                    | Grasslands; Marsh Creek.  |
| Antioch Multilid Wasp<br><i>Mymosula pacifica</i>                  | -/C2/-                    | Historic observations from Antioch.   |
| Yellow Banded Andrenid Bee<br><i>Perdita hirticeps luteocincta</i> | -/C2/-                    | Historically from Antioch.  |
| Antioch Andrenid Bee<br><i>Perdita scituta antiochensis</i>        | -/C2/-                    | Antioch.  |
| Antioch Specid Wasp<br><i>Philanthus nasilis</i>                   | -/C2/-                    | Formerly from Antioch.  |
| Phalangid<br><i>Sitalcina serpentinea</i>                          | -/-/-                     | Serpentine grasslands near Clayton.   |

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<sup>1</sup>Sources:

California Department of Fish and Game, California Natural Diversity Data Base, computer printout for Contra Costa County, June 1989.



TABLE 8-2 (Continued)

California Department of Fish and Game, 1989 Annual Report on the Status of California's State Listed Threatened and Endangered Plants and Animals, March 1990.

Smith, James P., Jr., and Ken Berg, Inventory of Rare and Endangered Vascular Plants of California, California Native Plant Society, Sacramento, CA, 1988.

<sup>2</sup>State/Federal/Other Status:

State: California Endangered Species Act (1984), Native Plant Protection Act (1977). Section 15380 of the Guidelines to the California Environmental Quality Act provides that a taxa should be treated as rare or endangered if it meets the State's definition and criteria for Rare or Endangered, even if the taxa is not officially listed as such.

CR=Rare. Plants, that although not currently Threatened, are in such small numbers or restricted habitats that they may become Threatened or Endangered if present conditions continue.

CT=Threatened. Plants or animals likely to become Endangered in the foreseeable future in the absence of protective action(s).

CE=Endangered. Seriously in danger of becoming extinct.

CCE=Candidate for listing as Endangered.

Federal: Federal Endangered Species Act of 1973, as amended.

FE=Taxa formally listed as Endangered.

FT=Taxa formally listed as Threatened.

C1=Candidate taxa for which there is enough information to support the biological appropriateness of proposing to list as Threatened or Endangered.

C2=Candidate taxa for which there is biological information indicating that proposing to list the taxa as Threatened or Endangered is possibly appropriate, but for which substantial data on biological vulnerability and threat(s) are not currently known or on file to support the immediate listing.

C3=Taxa that are no longer under consideration for listing because they are extinct (C3a), have taxonomic problems that do not meet the definition of a "species" in the Federal Endangered Species Act (C3b), or are too common or widespread and/or not subject to any identifiable threats (C3c).

TABLE 8-2 (Continued)

## Other:

California Native Plant Society Inventory of Rare and Endangered Plants (Smith and Berg, 1988):

List 1A=Plants presumed extinct in California.

List 1B=Plants rare or endangered in California and elsewhere.

List 2 =Plants rare or endangered in California; more common elsewhere.

List 3 =Plants for which more information is needed.

List 4 =Plants of limited distribution (a watch list).

CFP=California Fully Protected Species as designated by California Fish and Game Code.

SSC=Species of Special Concern as designated by California Department of Fish and Game.

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## Significant Ecological Areas and Selected Locations of Protected Wildlife and Plant Species Areas







The California Environmental Quality Act provides that species which qualify for classification as endangered, threatened or rare should be protected as such even if they have not been designated under Federal or State endangered species laws.

As part of the General Plan review, the County's biotic resource maps have been revised to reflect sightings of endangered, threatened and rare species as inventoried in the Natural Diversity Data Base prepared by the California Department of Fish and Game (CDFG). This information can be used when reviewing development plans to determine the presence of an endangered, rare or threatened plant and/or animal species on a project site. CDFG will be periodically updating information for Contra Costa County as new sightings are reported or additional historical sightings are uncovered. Data inventoried in the Natural Diversity Data Base is only an indication of the potential for the presence of a protected species. Only field surveys can determine the presence or absence of the species or suitable habitat at any particular site.

Some of the unique habitat areas that support Federal or State designated endangered species are already protected by public agencies (e.g. Mt. Diablo State Park and the Antioch Dunes), although many key areas remain under private ownership.

One area that has recently been identified as containing a unique habitat is the Vasco Caves area in the rural southeastern corner of the County. Specialized ecosystems appear to exist in the area which are worthy of preservation through either public or private efforts. The acquisition of lands in the area by the County for the East Contra Costa Airport, and of watershed lands by the Contra Costa Water District, may also aid in the permanent protection of some of these resources. To facilitate a better understanding of the unique archeological and natural resources in the southeast County area, a detailed inventory should be prepared. Efforts to secure financing for such an effort should be explored upon adoption of this plan.

Private landowners of ecologically significant resource areas (identified in Figure 8-2) who apply for subdivision or other land use permits shall, unless sufficient information is already available to the County, provide information to the County on the nature and extent of the biotic resources that exist in the area. The County Planning Agency shall be responsible for determining the balance between the multiple uses of the land and the protection of resources. The cumulative impacts on the natural resources from other rural uses such as agriculture, mining, or wind energy, must be examined and addressed as part of the review of applications. Both public and private stewardship of the resources within unique natural areas shall be considered as long as the protection is long term and guaranteed in some manner. Due to the fragile nature of some of these resources, however, public access to the areas should be limited or restricted.

The following statements shall guide County elected and appointed officials in making decisions which may affect the ecological resources of Contra Costa County. Note that not all of the biotic areas within the County are discussed here. Goals, policies, and implementation measures regarding riparian corridors vegetation and wildlife along creeks and streams are included in a later section of this element, "Water Resources - Urban and Rural Creeks."

#### VEGETATION AND WILDLIFE GOALS

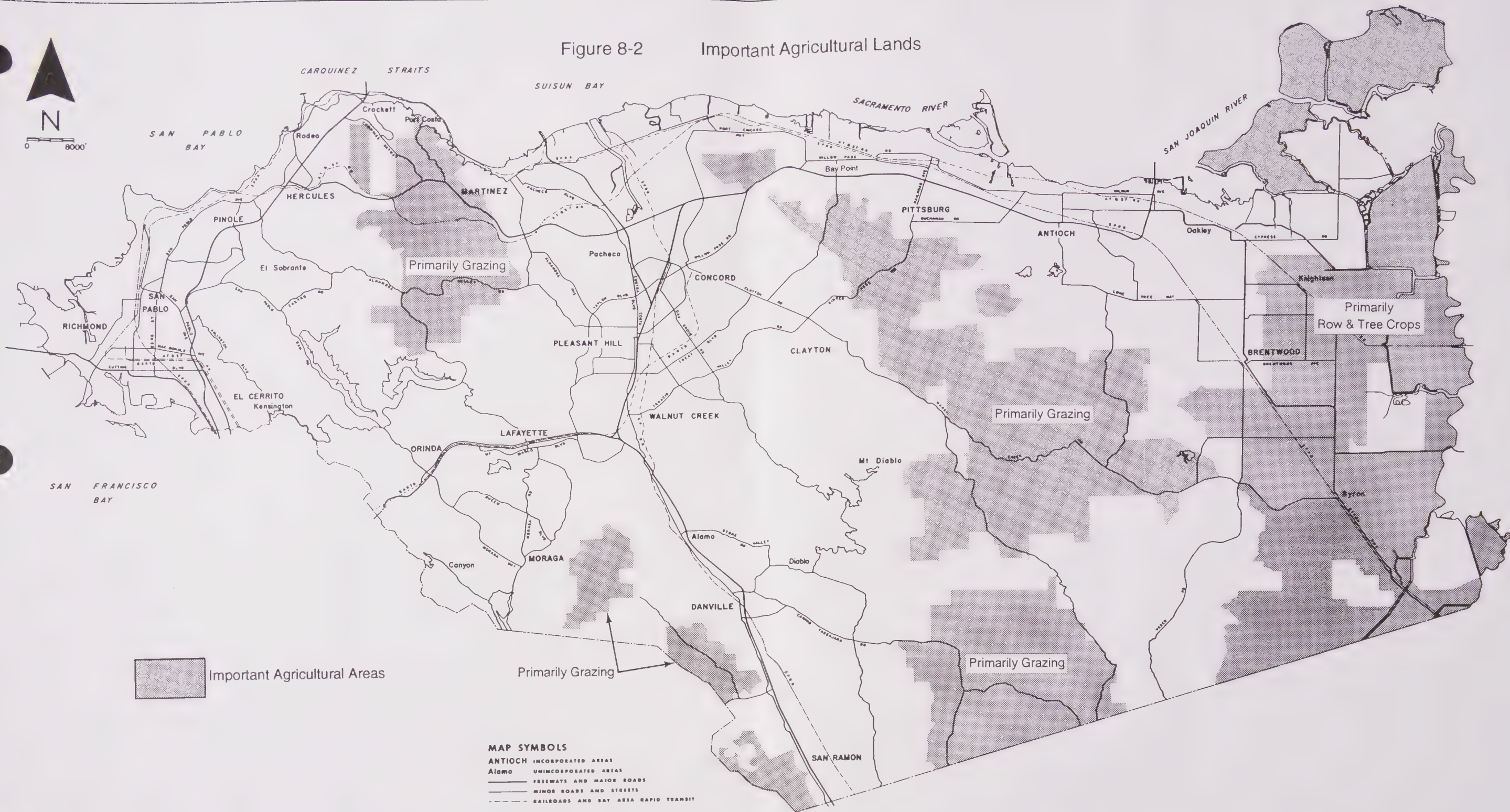
- 8-D. To protect ecologically significant lands, wetlands, plant and wildlife habitats.
- 8-E. To protect rare, threatened and endangered species of fish, wildlife and plants, significant plant communities, and other resources which stand out as unique because of their scarcity, scientific value, aesthetic quality or cultural significance. Attempt to achieve a significant net increase in wetland values and functions within the County over the life of the General Plan. The definition of rare, threatened and endangered includes those definitions provided by the Federal Endangered Species Act, the California Endangered Species Act, the California Native Plant Protection Act and the California Environmental Quality Act.
- 8-F. To encourage the preservation and restoration of the natural characteristics of the San Francisco Bay/Delta estuary and adjacent lands, and recognize the role of Bay vegetation and water area in maintaining favorable climate, air and water quality, and fisheries and migratory waterfowl.

#### VEGETATION AND WILDLIFE POLICIES

- 8-6. Significant trees, natural vegetation, and wildlife populations generally shall be preserved.
- 8-7. Important wildlife habitats which would be disturbed by major development shall be preserved, and corridors for wildlife migration between undeveloped lands shall be retained.
- 8-8. Significant ecological resource areas in the County shall be identified and designated for compatible low-intensity land uses. Setback zones shall be established around the resource areas to assist in their protection.
- 8-9. Areas determined to contain significant ecological resources, particularly those containing endangered species, shall be maintained in their natural state and carefully regulated to



Figure 8-2 Important Agricultural Lands



## CONTRA COSTA COUNTY CALIFORNIA





- 8-10. Any development located or proposed within significant ecological resource areas shall ensure that the resource is protected.
- 8-11. The County shall utilize performance criteria and standards which seek to regulate uses in and adjacent to significant ecological resource areas.
- 8-12. Natural woodlands shall be preserved to the maximum extent possible in the course of land development.
- 8-13. The critical ecological and scenic characteristics of rangelands, woodlands, and wildlands shall be recognized and protected.
- 8-14. Development on hillsides shall be limited to maintain valuable natural vegetation, especially forests and open grasslands, and to control erosion. Development on open hillsides and significant ridgelines throughout the County shall be restricted, and hillsides with a grade of 26 percent or greater shall be protected through implementing zoning measures and other appropriate actions.
- 8-15. Existing vegetation, both native and non-native, and wildlife habitat areas shall be retained in the major open space areas sufficient for the maintenance of a healthy balance of wildlife populations.
- 8-16. Native and/or sport fisheries shall be preserved and re-established in the streams within the County wherever possible.
- 8-17. The ecological value of wetland areas, especially the salt marshes and tidelands of the bay and delta, shall be recognized. Existing wetlands in the County shall be identified and regulated. Restoration of degraded wetland areas shall be encouraged and supported whenever possible.
- 8-18. The filling and dredging of lagoons, estuaries, and bays which eliminate marshes and mud flats shall be allowed only for water-oriented projects which will provide substantial public benefits and for which there are not reasonable alternatives, consistent with State and Federal laws.
- 8-19. The County shall actively oppose any and all efforts to construct a peripheral canal or any other water diversion system that reduces Delta water flows unless and until it can be conclusively demonstrated that such a system would, in fact, protect, preserve and enhance water quality and fisheries of the San Francisco Bay-Delta estuary system.
- 8-20. Fish, shellfish, and waterfowl management shall be considered the appropriate land use for marshes and tidelands, with recreation being allowed as a secondary use in limited locations, consistent with the marshland and tideland preservation policies of the General Plan.
- 8-21. The planting of native trees and shrubs shall be encouraged in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native wildlife, and ensure that a maximum number and variety of well-adapted plants are sustained in urban areas.
- 8-22. Applications of toxic pesticides and herbicides shall be kept at a minimum and applied in accordance with the strictest standards designed to conserve all the living resources of the County. The use of biological and other non-toxic controls shall be encouraged.



- 8-23. Runoff of pollutants and siltation into marsh and wetland areas from outfalls serving nearby urban development shall be discouraged. Where permitted, development plans shall be designed in such a manner that no such pollutants and siltation will significantly adversely affect the value or function of wetlands. In addition, berms, gutters, or other structures should be required at the outer boundary of the buffer zones to divert runoff to sewer systems for transport out of the area.
- 8-24. The County shall strive to identify and conserve remaining upland habitat areas which are adjacent to wetlands and are critical to the survival and nesting of wetland species.
- 8-25. The County shall protect marshes, wetlands, and riparian corridors from the effects of potential industrial spills.
- 8-26. The environmental impacts of using poisons to control ground squirrel populations in grasslands shall be thoroughly evaluated by the County.
- 8-27. Seasonal wetlands in grassland areas of the County shall be identified and protected.
- 8-28. All efforts shall be made to identify and protect the County's mature native oak, bay, and buckeye trees.
- 8-29. Development of a barge mooring facility on the West Contra Costa Sanitary Landfill site shall be allowed only in a manner which mitigates any adverse environmental impacts and is consistent with the policies and implementation measures in this chapter. Mitigation measures shall be determined through this chapter. Mitigation measures shall be determined through the development review process and implemented through land use permit conditions of approval.

## VEGETATION AND WILDLIFE IMPLEMENTATION MEASURES

### Significant Ecological Resource Inventory

- 8-a. As funding becomes available, prepare a detailed inventory of ecologically significant resource areas which include unique natural areas, wetland areas, habitats of rare, threatened, endangered and other uncommon and protected species. The inventory shall be mapped as an overlay to the existing Resource Mapping System and shall include buffer zones around the identified resource areas in order to take into account for periodic, seasonal, or ecological changes. The maps shall be revised on a regular basis to reflect the availability of new information from other agencies, changes in definition, or any other changes.
- 8-b. Maintain an updated list of State and Federal rare, threatened and endangered species which are known or suspected to occur in the County. The following other uncommon or protected species which occur or may occur in the County should also be included in the list: plant species which are included in the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California, species of special concern as designated by CDFG, and California Fully Protected animals as defined by California Fish and Game Code. In addition to making updates as new information becomes available, the list should be reviewed at least once every two years for adequacy.
- 8-c. In cooperation with other public and private agencies, prepare a detailed inventory of biological and archeological resources in the Southeast County area, to be used in project review.

Development Review Process

- 8-d. Update and maintain detailed maps of the significant ecological resource areas described in Implementation 8-a above, and use them in the environmental review process to determine potential impacts upon these resources.
- 8-e. Prior to the approval of discretionary permits involving parcels within a significant ecological resource area as described in Implementation Measure 8-a, the County shall require a biotic resources evaluation based upon field reconnaissance performed at the appropriate time of year to determine the presence or absence of rare, threatened or endangered species of plants or animals. Such evaluation will consider the potential for significant impact on these resources, and measures proposed to mitigate such impacts, where feasible, or indicate why mitigation is not feasible.
- 8-f. Prepare a list of standard mitigation measures from which the County could select appropriate measures to mitigate the impacts of projects in or adjacent to significant ecological resource areas.
- 8-g. Require the environmental impact analysis of all significant grassland land sites proposed for development to include an early spring site reconnaissance to determine the presence of vernal pools and rare species associated with vernal pools, and document the use of any seasonal wetlands by water bird species. A general observation of such sites during the dry portion of the year shall be deemed insufficient for environmental review. Significant grasslands include generally parcels of more than 40 acres which are located in an area dominated by native or introduced grass species.
- 8-h. Amend the ordinance to require developers to pay mitigation costs according to an adopted schedule, such as requiring, where appropriate, and to the extent legally permissible, that three new trees be planted for every one mature tree removed as part of a development. Replacement trees should be the same or a similar species as the tree removed, and should be native species or naturalized species which are well-adapted to the site's conditions without posing a threat of invasion into surrounding lands.
- 8-i. Amend the ordinance to prohibit damage to heritage trees by soil compaction, grading, filling or alteration of drainage patterns beneath the root zones of heritage trees during construction. Watering programs for lawns and gardens in new subdivisions should be designed to prevent soil saturation around the root zones of oak trees during the summer months to avoid infection by oak root fungus.

Wetland Areas

- 8-j. A setback from the edge of any wetland area may be required for any new structure. The breadth of any such setback shall be determined by the County after environmental review examining (a) the size and habitat value of the potentially affected wetland, and (b) potential impacts on the wetland, and adjacent uplands, arising out of the development and operation of the new structure. Unless environmental review indicates that greater or lesser protection is necessary or adequate, setbacks generally will be between 50 and 100 feet in breadth. Expansions or other modifications of non-habitable agriculturally-related structures existing as of 1990 shall be exempt from this setback requirement. Parcels which would be rendered unbuildable by application of this standard shall also be exempt.



- 8-k. Permit minor landfill (less than one acre) or other land reclamation for water-oriented uses only if a finding has been adopted by the planning body that verifies no alternative site is available, and if public benefits clearly exceed public detriments from the loss of open water or tidelands areas.
- 8-l. The County shall require avoidance, minimization and/or compensatory mitigation techniques to be employed with respect to specific development projects having a potential to affect a wetland. In evaluating the level of compensation to be required with respect to any given project, (a) on-site mitigation shall be preferred to off-site and in-kind mitigation shall be preferred to out-of-kind, (b) functional replacement ratios may vary to the extent necessary to incorporate a margin of safety reflecting the expected degree of success associated with the mitigation plan, and (c) acreage replacement ratios may vary depending on the relative functions and values of those wetlands being lost and those being supplied.  
  
To the extent permitted by law, the County may require 3:1 compensatory mitigation of any project affecting a "Significant Wetland".
- 8-m. Urge the appropriate State and federal agencies to implement a rigid and frequent inspection system of all industrial facilities along the shoreline which have the potential of creating hazardous spills.
- 8-n. Adopt an emergency response plan which outlines how to ensure the swift construction of floating oil slick barriers at the mouths of all slough and creek channel inlets along the County's shoreline areas, in the event of an oil or other hazardous material spill.

#### Zoning Ordinance Revisions

- 8-o. Amend the County Zoning Ordinance to include a "Significant Ecological Resources Area" combining district. Apply the zoning to distinct properties with proven significant ecological resource area as defined in (a) above. Consider including in the regulations of the combining district the provisions of (d), (e), (f), (g), (h), (i), (j), (k), (l), (m), (n) and (o) above. Consider including in the provisions of the combining district performance criteria and standards which shall apply to projects within the district.

#### Other Programs

- 8-p. Cooperate with, encourage and support the plans of appropriate public agencies to acquire privately-owned lands in order to provide habitat protection for the maintenance of rare, threatened or endangered plant and animal species.
- 8-q. Expand the range of uses or inclusion of land in the Agricultural Preserve Program to include "wildlife habitat area," in compliance with the amended Land Conservation Act of 1965, or the Open Space Easements Program.
- 8-r. Encourage the revegetation of native grass species on lands which have been modified for agriculture, where appropriate.
- 8-s. Require a demonstration that the eradication and control program is necessary to protect agricultural crops and Delta levees, or to prevent or control outbreak plague in an area, and require that the environmental impacts of the program upon other wildlife species are adequately analyzed and documented.



- 8-t. Identify and map "critical erosion areas" on hillsides and in creekbeds in upland areas. Discourage excess grazing practices in erosion areas and institute reclamation measures.
- 8-u. Encourage the propagation of native oaks in foothill woodlands, where appropriate, by limiting cattle grazing to compatible light or moderate levels, and/or encouraging the replanting of native oak species. Proper planting and maintenance techniques are necessary to ensure the long term survival of newly establish oaks.

## 8.7 AGRICULTURAL RESOURCES

### INTRODUCTION

The following section presents background data on the relative importance of the County's agricultural resources. The analysis is based upon economic performance indicators, and indicates that agricultural resources in the County represent a significant economic asset.

The dominant trend in local agriculture in Contra Costa County since 1940 has been a significant decrease in the amount of acreage in production. Much of this decline is attributable to the increasing urbanization of the region, a process which over time gradually converts agricultural lands to housing and other urban uses. In Contra Costa County, land in all types of active agricultural uses (cropland and grazing lands) has declined by almost half, from over 400,000 acres in 1940 (or 85 percent of the County's total land area) to almost 216,000 acres in 1987 ( 46 percent of all County lands).

Table 8-3 includes a general summary of changes in acreage devoted to the major types of agricultural production in Contra Costa County since 1940. It should be noted that range and pasture lands, which provide grazing for large farm animals and dry farming of grains for feed, have historically accounted for a large portion of total agricultural acreage in the County. These lands include all areas with steep slopes, rugged terrain, a lack of adequate water supply, or other natural constraints which make the land unsuitable for more intensive agricultural activities. In 1940, two-thirds of all agricultural lands in the County were in this rangelands category; by 1990 rangeland accounted for 83 percent of all agricultural acreage, primarily due to the decline in other intensive farming techniques.

While the total amount of agricultural land county-wide has decreased by 47 percent since 1940, changes in the non-rangeland farm categories have been even greater. Field crops such as hay, barley and wheat grown in the County have plummeted in acreage by 72 percent since World War II, although most of the decline occurred prior to 1970 and the amount of land producing these crops remained stable in the 1980s (see Table

8-3). Orchard lands devoted to growing fruits and nuts have seen the greatest recent decline, however, registering a 51 percent decrease in acreage between 1980 and 1990.

Vegetable croplands decreased in acreage by over one-half between 1960 and 1970 remained relatively stable during the 1970's, and increased slightly during the 1980's.

Farmlands supporting fruit and nut trees have decreased significantly since the years prior to World War II when orchards dotted the flat valleys of Central County. Although land producing fruits and nuts declined by less than 40 percent between 1940 and 1970, the numbers distort the true story. While subdivisions replaced the orchards outside Walnut Creek and Concord, new tree crops were planted on irrigated lands in East County. In 1960, there were almost 4,500 acres of apricot and pear trees; by 1990, that number had dropped to less than 1,200 acres. Wine grapes, once grown on over 5,000 acres, now account for less than 1,000 acres. The most important fruit and nut crops in terms of acreage, continue to be walnuts and almonds, which accounted for approximately 1,600-bearing acres in the County in 1990.

Although the cultivated acreage in all categories of farm crops has declined precipitously over the last 50 years, significant increases in productivity have offset the vastly reduced acreage available for some crops. For example, although the land in the County devoted to tomatoes has remained relatively stable (5,900 acres in 1940 to 4,800 acres in 1990), the yield has more than tripled from 39,000 tons to 130,000 tons annually.

As Contra Costa County has undergone a dramatic transition from a rural to suburban environment, specialized forms of agriculture such as nursery products have increased their market share. The largest nursery crop producers are located in the North Richmond area of West County. Production of specialized nursery crops (bedding plants, cut flowers, house plants, shrubs, and Christmas trees) is now by far the largest income producing agricultural operation in Contra Costa County, amounting to \$22.5 million in gross receipts in 1990.

TABLE 8-3  
CHANGE IN AGRICULTURAL ACREAGE BY TYPE OF ACTIVITY<sup>1</sup>  
IN CONTRA COSTA COUNTY  
(1940-1990)

|                   | <u>1940</u>   | <u>1950</u>   | <u>1960</u>   | <u>1970</u>        | <u>1980</u>   | <u>1990</u>  |
|-------------------|---------------|---------------|---------------|--------------------|---------------|--------------|
| Pasture and Range | 275,500       | 246,250       | 217,000       | 187,060            | 175,730       | 179,000      |
| Field Crops       | 80,780        | 55,990        | 38,170        | 31,210             | 22,800        | 22,800       |
| Vegetables        | 21,260        | 10,750        | 16,940        | 7,230 <sup>2</sup> | 7,680         | 8,560        |
| Fruits and Nuts   | <u>30,780</u> | <u>30,590</u> | <u>27,510</u> | <u>18,940</u>      | <u>11,160</u> | <u>5,480</u> |
| TOTAL             | 408,320       | 343,580       | 299,620       | 244,440            | 217,370       | 215,840      |

<sup>1</sup> Includes only acres harvested or under cultivation, rounded to nearest 10 acres.

<sup>2</sup> Severe spring frosts during 1970 resulted in an abnormally low number of acres in vegetables. In 1969 and 1971, there were 9,660 and 8,030 acres in vegetable production, respectively.

Source: Compiled from Contra Costa County Agriculture Department annual Crop and Livestock Reports.



TABLE 8-4  
GROSS RECEIPTS OF AGRICULTURAL PRODUCTS  
(GROSS VOLUME OF SALES IN MILLIONS OF DOLLARS)

|                                   | <u>1980</u> | <u>1984</u> | <u>1988</u> | <u>1990</u> |
|-----------------------------------|-------------|-------------|-------------|-------------|
| <u>Nursery Products</u>           |             |             |             |             |
| Indoor Decoratives                | 4.9         | 2.4         | 1.7         | 1.6         |
| Bedding Plants                    | 4.0         | 5.8         | 9.3         | 12.2        |
| Roses                             | 3.9         | 5.2         | 5.0         | 4.4         |
| Vegetable Plants                  | 1.4         | 0.8         | 0.6         | .7          |
| Herbaceous Perennials             | 1.1         | 1.1         | 1.7         | 2.0         |
| Other Nursery Products            | 1.8         | 3.0         | 1.6         | 1.6         |
| Subtotal                          | 17.0        | 18.3        | 20.4        | 22.5        |
| <u>Vegetables and Seed Crops</u>  |             |             |             |             |
| Tomatoes                          | 5.7         | 7.4         | 9.2         | 7.8         |
| Asparagus                         | 2.4         | 2.9         | 2.4         | 2.3         |
| Sweet Corn                        | 0.7         | 1.7         | 1.4         | 1.5         |
| Squash                            | 0.6         | 1.0         | 0.3         | 0.4         |
| Other Vegetables and Crops        | 1.3         | 0.8         | 1.2         | 0.8         |
| Subtotal                          | 10.7        | 14.9        | 14.5        | 12.4        |
| <u>Livestock, Poultry, Apiary</u> |             |             |             |             |
| Sale of Beef Cattle               | 7.6         | 5.7         | 4.9         | 5.0         |
| Dairy Milk                        | 4.6         | 7.4         | 4.3         | 5.4         |
| Other Livestock/Apiary/Poultry    | 1.9         | 2.9         | 1.2         | 1.9         |
| Subtotal                          | 14.1        | 16.0        | 10.4        | 12.3        |
| <u>Fruits and Nuts</u>            |             |             |             |             |
| Walnuts                           | 2.8         | 1.3         | 1.5         | 1.1         |
| Apricots                          | 1.0         | 2.0         | 1.6         | 2.1         |
| Pears                             | 0.8         | 0.4         | N/A         | 0.7         |
| Cherries                          | 0.7         | 1.0         | 0.9         | 0.5         |
| Grapes                            | 0.5         | 0.5         | 1.5         | 0.9         |
| Other Fruits and Nuts             | 0.9         | 1.9         | 2.6         | 3.9         |
| Subtotal                          | 7.0         | 7.1         | 8.1         | 9.2         |
| <u>Field Crops</u>                |             |             |             |             |
| Pasture Crops                     | 3.5         | 3.1         | 3.7         | 4.4         |
| Sugar Beets                       | 2.9         | 1.2         | N/A         | N/A         |
| Wheat                             | 1.9         | 1.3         | 0.6         | 0.7         |
| Hay                               | 1.9         | 1.2         | 2.0         | 2.1         |
| Field Corn                        | 0.9         | 2.9         | 1.1         | 1.6         |
| Other Field Crops                 | 1.8         | 0.9         | 0.6         | 0.9         |
| Subtotal                          | <u>12.2</u> | <u>10.6</u> | <u>8.0</u>  | <u>9.2</u>  |
| GRAND TOTAL                       | 61.6        | 66.8        | 61.4        | 66.4        |

Source: Contra Costa County Department of Agriculture, annual Crop and Livestock Reports.

Note: Gross receipts listed above do not take into account the costs of production, transportation or marketing.

nursery crops (bedding plants, cut flowers, house plants, shrubs, and Christmas trees) is now by far the largest income producing agricultural operation in Contra Costa County, amounting to \$22.5 million in gross receipts in 1990.

The sale of nursery crops now makes up one third of the approximately \$66.3 million collected each year in agricultural receipts. The largest single crop in terms of sales is bedding plants, which has more than tripled from a \$4 million business in 1980 to \$12.2 million in 1990.

The second largest money-producing agricultural category in Contra Costa County after nursery crops is vegetables. Virtually all of the remaining row crop farms with significant annual sales are located on East County lands adjacent to the Sacramento-San Joaquin River Delta. Although only 31 farms were counted as harvesting vegetables at the time of the last farm census in 1987, the market value of the produce has grown to almost \$12.4 million in 1990.

Tomatoes represent the biggest portion of vegetable sales, about \$7.4 million in 1990. Tomatoes are raised on a dozen East County farms and account for over half of all the cropland used for vegetables. Other important vegetables in the County are asparagus (\$3.2 million in gross receipts in 1990), sweet corn (over \$1.5 million in 1990), squash ( \$435,000), , and beans ( \$351,000).

Range and pasture lands, which provide grazing for large farm animals and dry farming of grains for feed, account for a large portion of total agricultural acreage in the County. These lands include all the areas with steep slopes, rugged terrain, a lack of an adequate water supply, or other natural constraints which make the land unsuitable for more intensive agricultural activities. Raising cattle for sale has traditionally been the third most important agricultural activity, in terms of receipts collected each year, after nursery plants and vegetables. Livestock, poultry, and apiary products accounted for \$9.9 million in receipts in 1990. However, the number of livestock in the County, primarily beef and dairy cattle, has declined from 43,000 head in 1960 to 15,000 head in 1990.

Gross receipts for beef and dairy cattle sales accounted for \$6.5 million in 1990. On the dairy side, milk production is still a significant activity in the County, with three large producers. The volume of milk marketed has grown from 283,000 hundred weight (cwt) in 1960 to 361,000 cwt in 1970 to 454,000 (cwt) in 1990, representing \$5.4 million annually in receipts.

Several hundred small and medium-sized orchards remain in the County, on approximately 5,500 acres mainly concentrated in East County. The total production from orchards represents \$9.2 million in gross sales annually. The most important crops in the fruit and nut category, in terms of acreage, are walnuts and apricots, which account for about 2,600 acres in the County.

The most lucrative orchard crops in Contra Costa County are apples, apricots and walnuts. In 1990, gross receipts from apples and apricots totaled \$2.7 and \$2.1 million respectively, followed by \$1.1 million in receipts for English walnuts in the shell. It should be noted, however, that the acreage in walnut orchards has declined by 50 percent during the 1980s as orchards in East County have gone out of business or have been converted to urban uses. Other significant fruit crops in the County are grapes (\$911,000) and pears (705,000). Gross receipts for all other fruit and nut crops, including peaches, pears, strawberries, pistachio nuts, etc., amount to about \$2.2 million annually.

Field crops include grains such as corn, hay and silage raised for animals, as well as barley, sugar beets, and wheat. Annual gross receipts totaled approximately \$9.9 million in 1990, down from 12.9 million the year before.

A recurring problem in agricultural areas is the dilemma of permitting a limited amount of land subdivision, without affecting the continued viability of agricultural operations. In Contra Costa County, minor subdivisions of farming properties are often requested so that a member of the family can build an additional home on the property. Banks require collateral for construction loans; few landowners wish to risk the entire holding, or a large portion of it, as security for a construction loan. Minor subdivisions are also requested when a farming family wishes to sell of a small piece of their land in order to make up a shortfall on the remaining operation.

While the limited subdivision of agricultural lands for legitimate reasons should be accommodated by the County, it is apparent that allowing a proliferation of land divisions in a given area will have a disastrous effect on other farmers or ranchers who are trying to remain in business. The proliferation of minor subdivisions has the effect of creating smaller and smaller parcels of land in agricultural areas, with more and more "ranchette" units owned by non-farming families moving into the area and bidding up the price of the land, which in turn drives out the original farmers. Adequate minimum parcel sizes in agricultural zones must be maintained in order to protect the existing farm operations and to discourage urban landowners from building homes in the area.

There are a number of standards and implementation policies which the County can choose from in protecting the economic viability of agricultural land. One opportunity for assisting the farm or ranch operation to remain



in business is the concept of "transfer or purchase of development credits" (TDR/PDR). Transfer or purchase of development credits is a method of preserving agricultural and other open space lands by providing the owner with compensation either by providing cash payments for a property's urban development potential or by crediting and transferring this potential to another property. In this way, the agricultural landowner reaps the benefit of agricultural land development potential without the negative effect that construction and occupation of homes on these lands can bring.

Other strategies for the continued viability of agricultural pursuits include preservation agreements with the County, granting conservation easements, direct purchase, leasebacks, tax benefits for agriculture or open space land, purchase or transfer of development rights, clustering development, establishment of an agricultural soils trust fund, and agricultural mitigation fees or land dedication (in-lieu fee).

During the 1970s and 1980s, the County has seen the growth of "ranchette" style housing. These homes appeal to people with urban incomes who wish to pay extra to live in the more rural, hilly parts of the county and are typically located on large lots (five acres or more). Many of these property owners are small time farmers, while some of the demand is from residents who own horses and wish to stable them near their homes. Ranchettes are also occupied by retired ranchers or farmers who do not wish to leave the area, but no longer work the land.

The policies of the Contra Costa County Board of Supervisors regarding ranchettes is contained in a 1983 resolution of the Board (No. 83/407) entitled "Rural Residential Development." The policy states that ranchettes created by such parcelization are inappropriate in prime agricultural areas where active cultivation such as row crops or orchards are present. Furthermore, the policy states ranchettes are to be discouraged within city spheres of influence.

This General Plan incorporates the Rural Residential Development policy as it relates to subdivisions of lands planned for agricultural uses. The plan specifically discourages major subdivisions in agricultural areas. However, if major subdivision occurs, the plan requires rezoning of the project area to the Planned Unit Development District, with the property owner required to deed further development rights to the County in order to mitigate the impact of development of the lands.

The Plan also incorporates an Urban Limit Line. Reflecting Measure C - 1990, for prime productive agricultural lands (Class I and II Soils based on the SCS Capability Classification) outside the Urban Limit Line, a minimum parcel size is determined to be 40 acres. One factor and criteria for determining whether land should be located outside the ULL is also related to the preservation of economically viable agricultural land. Land which qualifies

for rating as Class I and Class II in the Soil Conservation Service Land Use Capability Classification is one of the factors to be considered in establishing the ULL. Rural residential and certain agricultural structures (allowed by applicable zoning) are included within the 65 percent non-urban uses in the 65/35 Land Preservation Standard. Agricultural lands within the Urban Limit Line would have variable sizes.

## MAPS AND INVENTORY OF AGRICULTURAL RESOURCE AREAS

Figure 8-2 illustrates the most important agricultural lands found in the County. This figure indicates that there are important grazing lands found in the Briones Hills, Bollinger Canyon, Tassajara, and other areas, while the most important orchard and row crops are located in the East County area.

While there are some public lands in the County (e.g., watershed lands owned by the East Bay Municipal Utility District (EBMUD)) that allow the grazing of livestock, these lands are not generally included on the Figure 8-2 map, since grazing is not the primary activity. The use of EBMUD lands, as well as regional or State park lands, for grazing may be discontinued in the future.

The agricultural preservation policies found in this section focus on these remaining important grazing, orchard, and row crop areas in the County.

## AGRICULTURAL RESOURCES GOALS

- 8-G. To encourage and enhance agriculture, and to maintain and promote a healthy and competitive agricultural economy.
- 8-H. To conserve prime productive agricultural land outside the Urban Limit Line exclusively for agriculture.
- 8-I. To minimize conflicts between agricultural and urban uses.
- 8-J. To encourage cooperation between the County and cities in the preservation of agricultural lands.

## AGRICULTURAL RESOURCES POLICIES

### Overall Policies

- 8-29. Large contiguous areas of the County should be encouraged to remain in agricultural production, as long as economically viable.
- 8-30. In order to reduce adverse impacts on agricultural and environmental values, and to reduce urban costs to taxpayers, the County shall not designate land located outside the ULL for an urban land use.

- 8-31. Urban development in the future shall take place within the Urban Limit Line and areas designated by this plan for urban growth.
- 8-32. Agriculture shall be protected to assure a balance in land use. The policies of Measure C - 1990 shall be enforced.
- 8-33. The County shall encourage agriculture to continue operating adjacent to developing urban areas.
- 8-34. Urban developments shall be required to establish effective buffers between them and land planned for agricultural uses.
- 8-35. Residents in or near agricultural areas shall be informed and educated regarding the potential nuisances and hazards associated with nearby agricultural practices.
- 8-36. Agriculture shall be protected from nuisance complaints from non-agricultural land uses.
- 8-37. The use of toxic and nutritive chemicals by agricultural operators shall be minimized.
- 8-38. Agricultural operations shall be protected and enhanced through encouragement of Williamson Act contracts to retain designated areas in agricultural use.
- 8-39. A full range of agriculturally-related uses shall be allowed and encouraged in agricultural areas.
- 8-40. A 40-acre minimum parcel size for prime productive agricultural land (Class I and II Soils per SCS Land Use Capability Classification) shall be established by the County for land outside the designated Urban Limit Line. To the extent feasible, the County shall enter into preservation agreements with cities in the County designed to preserve land for agriculture.

Policies Encouraging the Economic Viability of Agriculture

- 8-41. The promotion and marketing of locally grown agricultural products shall be encouraged.
- 8-42. The importance of the agricultural production, processing, and services industry within the County shall be recognized, and agriculture shall be integrated into the County's overall economic development programs.
- 8-43. The physical and service infrastructure, public and private, which supports agriculture shall be promoted.
- 8-44. Agricultural processing and service businesses in agriculturally designated areas may be permitted.
- 8-45. Efforts to assure an adequate, high quality, and fairly priced water supply to irrigated agricultural areas shall be supported.
- 8-46. Maintenance and reconstruction of Delta levees shall be encouraged to assure the continued availability of valuable agricultural land protected by the existing network of levees and related facilities.
- 8-47. The County shall ensure that its fiscal policies and practices provide the maximum lawful protection to owners of agricultural lands.
- 8-48. Farm worker and farm family housing may be permitted in agricultural areas to meet the needs of locally employed transient and permanent farm workers and family farm workers. In addition to the 40-acre



minimum parcel size, and preservation agreements, other standards and policies to protect the economic viability of agricultural land shall be established. These may include conservation easements, an agricultural soils trust fund, and agricultural mitigation fees.

## AGRICULTURAL RESOURCES IMPLEMENTATION MEASURES

### Rural Residential Development

8-w. Requests for subdivision of lands designated for agricultural or open space uses shall be reviewed for consistency with this plan according to the following criteria:

- (1) Cities should be informed in a timely manner when applications are filed and consulted as to their ultimate plans in the relevant area.
- (2) Agricultural/Open Space subdivisions are considered a long-term, rural/residential use of the land. Parcel size shall be a minimum of 5 acres in lands designated Agricultural Lands and 20 Acres in lands designated Delta Recreation and 40 acres in lands designated prime productive agricultural lands.
- (3) Any application for parcels to be separated from a larger parcel or parcels under the same ownership shall indicate on the plan all of the contiguous land held by the applicant.
- (4) Prior to the filing of the Final or Parcel Map the applicant must comply with the following:
  - (a) Each parcel must have an "on site" producing water well or install a "test well" having a minimum yield of three gallons per minute with bacterial and chemical quality in compliance with the State standards for a pure, wholesome and potable water supply (Title 22, Section 64433). If the chemical analysis exceeds the State standards for "maximum contaminant levels" for water potability, a statement must be attached and "run with the deed" advising of these levels; or
  - (b) Have verifiable water availability data from adjacent parcels presented by the applicant, or knowledge of the same, known by the Health Services Department concerning water quality and quantity per (a) above; and, have a statement that "attaches and runs with the deed" indicating that a water well shall be installed on the subject parcel complying with the general requirements stated above prior to obtaining a Building Inspection Department permit for construction.
  - (c) In addition to the above, a hydrogeological evaluation may be required in known or suspected water short areas. This will include seasonal as well as yearly variations.
  - (d) The purpose for requesting hydrogeological evaluations is to determine the total projected number of dwelling units that can be supplied with drinking water from existing aquifers. The two primary circumstances that would generally require hydrogeological evaluations are:
    - (i. where a proposed major subdivision contemplating the addition of large numbers of dwelling units on individual wells would substantially

increase the density within an existing drainage basin. Hydrogeological data relevant to recharge of aquifers and projected yield would become essential not only to support approval of large major subdivisions under these circumstances, but also to ensure that the water supplies serving existing structures would not be depleted by the proposed increase demand.

- (ii. In those cases where density is increasing in particular drainage basins due to the buildout of previously approved subdivisions using individual wells for water supplies, existing well yields begin to evidence declines due to the increased demand or in water short basins, hydrogeological studies would be appropriate as conditions of approval of subsequent development to provide sufficient yield for proposed uses. Specific reasons will be stated in support of requested hydrogeological evaluations in each case.
- (6) Road, street and access requirements, including necessary right-of-way acquisition and/or dedications, will be subject to the Department of Public Works recommendations for each parcel in accordance with the County Subdivision Ordinance and with standards and policies of that department.
- (7) The land must be suitable for septic tank use according to the County Ordinance Code criteria and Health Services Department Regulations. Percolation tests must be passed on all lots prior to the filing of the Parcel or Final Map.
- (8) The applicant shall indicate on the Tentative Subdivision Map the following information for each parcel: proposed driveways, building site, well site, leach field site, provision for water storage for fire fighting. Homesites shall be designed with a minimum of grading. Where significant grading is needed and acceptable erosion control plan shall be provided with the application. Home siting shall be reviewed for energy conservation features (building site orientation and feasibility for solar facilities will be considered).
- (9) Parcels shall be reasonable free of hazards, including, but not limited to flooding and high landsliding susceptibility.
- (10) Special detailed plans may be required for provision of flood control, roads and other services.
- (11) Developer shall obtain requirements for road and flood control improvements from County Public Works Department prior to submitting an application for subdivision. Required improvements shall be included on the Tentative Subdivision Map.
- (12) Adequate fencing shall be provided to contain domestic animals on the residential parcels with all gates to be closeable by a nearby rancher/farmer when necessary.
- (13) Exception to any of the above Rural Residential Ranchette criteria may be considered by the hearing body upon a showing, in writing, of unique or unusual circumstances relative to the subject property.

Development Review Process

- 8-x. Within the major resource conservation areas, consider approval of development that is only directly related to agricultural production, recreation, water-related recreation, or the utilization of mineral, soil, water, and animal resources; or agricultural/residential uses of similar character.
- 8-y. Discourage applications for major subdivisions of agricultural lands. Where such applications are accepted for processing, require concurrent application for rezoning of such lands to the Planned Unit Development District. Require deed of development rights to prevent further subdivision when so doing is consistent with law.
- 8-z. Identify and map those properties that include prime productive agricultural soils (Class I and II capability according to the U.S. Soil Conservation Service) for use in the review of development applications and evaluating the ULL.

Zoning Ordinance Revisions

- 8-aa. Modify the agricultural zoning districts to allow agricultural service businesses and uses in agriculturally designated areas as follows:
  - (1) Small agricultural service businesses, which can be defined as a home occupation, are permissible in all agricultural designations;
  - (2) Larger agricultural service businesses which have more than one employee but are clearly subordinate to on-site production activities, and which occupy less than ½ acre of land and do not adversely affect agricultural production in the area, may be permissible in all agricultural designations, subject to issuance of a land use permit;
  - (3) Agricultural service businesses that occupy more than ½ acre of land and are not subordinate to on-site production activities will require rezoning with a "Agricultural Service Combining District" overlay.
- 8-ab. Agricultural employee housing may be permitted, in addition to the residential density allowed by the underlying zoning or land use designation, in accordance with the needs of the local production sector. Criteria to establish the specific conditions which will apply to the agricultural employee housing shall be included in the Zoning Ordinance and shall address permanent and transient employees.
- 8-ac. Review and revise, as necessary, minimum lot size standards in agricultural zoning districts within the Urban Limit Line to be consistent with the goals and policies in this General Plan. Minimum lot sizes for prime productive agricultural soils designated agricultural use in the Land Use Element (Class I and II) shall be set at 40 acres outside the Urban Limit Line.

Infrastructure Services

- 8-ad. Consider detaching land in agricultural production not planned for development from any special taxing districts which are intended to serve urban needs, such as sewage treatment and hospital districts.
- 8-ae. In a manner consistent with growth management policies, allow water lines or other urban infrastructure which must be constructed across agricultural properties outside LAFCO designated Spheres of Influence



in order to serve parks, other open space uses, or existing urban development, of a size as needed to serve the open space or existing urban uses. Do not require adjacent property owners to pay for the service, and generally mitigate to an insignificant level any identified growth-inducing impacts of the project.

- 8-af. Provide a circulation system appropriate to rural development to support land uses and economic activity.
- 8-ag. Discourage the construction of growth-inducing highways or roads serving areas outside LAFCO designated Spheres of Influence unless the growth-inducing impacts of the project have been mitigated. Highways built in non-urban areas should limit access to what is necessary to serve planned land uses and emergency needs.
- 8-ah. Encourage water reclamation and other public improvement projects which would increase, enhance, and protect agricultural land and its production capabilities.

#### Agricultural/Urban Buffers and Conflicts

- 8-ai. Require adequate setbacks for any non-agricultural structures located within or adjacent to cultivated agriculture.
- 8-aj. Where a discretionary development permit is sought within or adjacent to agricultural districts, reduce potential conflicts by creation of a natural or constructed buffer between the agricultural and urban land use. Such buffers must occur on the parcel for which the discretionary permit is sought.
- 8-ak. Where unmitigable conflicts exist between agricultural and residential uses, generally give priority to maintaining the agricultural use.
- 8-al. In grazing areas, include within buffers fencing that will effectively contain grazing animals, keep domestic dogs out of grazing areas, and deter trespassing.
- 8-am. Conduct a study of the nature and extent of the conflicts between agriculture and urban land uses; identify the present and future areas where agriculture and urban land uses border one another; establish specific design guidelines which address:
  - (1) the appropriate width and design features of buffer areas and fencing;
  - (2) the necessary organizational components of homeowners' association language that provide for maintenance of buffers and fences and other measures such as surety bonds;
  - (3) necessary amendments to the Zoning Ordinance and Subdivision Ordinance which assure that the design guidelines are rigorously imposed and enforced; and
  - (4) control of trespassing, crop theft, and vandalism.
- 8-an. Require an agricultural notification statement in the property deeds for all new residential lots created in or adjacent to planned agricultural districts. The statement shall inform owners about allowed adjacent agricultural practices.
- 8-ao. Sponsor educational programs in cooperation with the county's school districts and the East Bay Regional Park District to inform students regarding need to respect agricultural uses.

- 8-ap. Prepare a "Right-to-Farm" Ordinance which protects ranchers and farmers within an agricultural district from nuisance complaints and unreasonable restrictions or regulations on farm structures or farming practices. The ordinance will describe normal farm practices expected to occur in agricultural areas and assure the right of the farmer or rancher to continue such practices subject to appropriate health and safety standards.
- 8-aq. Vigorously enforce the provisions of the existing State of California agricultural nuisance law by the appropriate County departments.
- 8-ar. Control the predation on grazing animals by domestic dogs by:
  - (1) establishing a county-wide law which prohibits free running dogs;
  - (2) posting grazing areas with signs specifying the provisions and penalties imposed by the law;
  - (3) imposing civil fines upon dog owners whose dogs damage livestock; and
  - (4) increasing efforts by County Animal Control to manage free running dogs.

#### Programs to Support the Economic Viability of Agriculture

- 8-as. Create and support a "Locally Grown in Contra Costa" marketing program. Permit and support a wide variety of promotional and marketing activities of county-grown and processed products. Continue to support the "Harvest Time" Program.
- 8-at. Research means of maintaining and improving the economic viability of agriculture in the County.
- 8-au. Develop Private Industry Council (PIC) programs to assist agriculture provided that such assistance is requested. Individual participation shall be voluntary.
- 8-av. Ensure that the agricultural industry is as eligible for economic assistance and support as is provided to other industries.
- 8-aw. To the extent possible, consider the promotion of agriculture produced in Contra Costa County as a priority in the disbursement of available County funds.
- 8-ax. Cooperate with the County's agricultural interests and communicate supportive positions to State and federal legislative bodies when major legislation is proposed which may affect local agriculture.
- 8-ay. Adopt a "Buy American" policy regarding the purchase of agricultural goods.
- 8-az. Allow agriculturally-related commercial and industrial uses to be conveniently and accessibly located in commercial agriculture areas, subject to appropriate planning and/or permit procedures.

#### Agricultural Preserve Contracts

- 8-ba. Encourage owners of agricultural land to enter the Agricultural Preserve Program.

- 8-bb. Encourage the continued use of Agricultural Preserve contracts to maintain land in agriculture and to lower property taxes for participating farmers and ranchers.
- 8-bc. Investigate options for making Agricultural Preserve contracts more attractive, such as changes in allowable uses or increasing tax benefits.
- 8-bd. Support property tax assessments within agricultural areas based upon their agricultural use, for properties that do not qualify for the Williamson Act.

#### Transfer/Purchase of Development Rights

- 8-be. Study the impacts of adopting Transfer or Purchase of Development Rights (TDR/PDR) programs in priority areas of the County as a means of mitigating development pressures and preserving agricultural land. Conduct a detailed study of transfer/purchase of the development credits approach to determine:
  - (1) the overall feasibility and usefulness in implementing General Plan policy;
  - (2) the specific mechanisms to be utilized;
  - (3) the areas of the County where these mechanisms could be utilized;
  - (4) the organizational and administrative requirements of such a program, including an analysis of the benefits of creating a non-profit land trust to hold agricultural land and easements;
  - (5) the cost of the program to the County and potential revenue sources.

#### Water Conservation and Supply

- 8-bf. Conduct a study of the agricultural irrigation water supply that addresses:
  - (1) existing suppliers and their water delivery infrastructure, water contracts and rights, and their ability to provide irrigation water;
  - (2) competing demands for land and water that affect the long-term availability of irrigation water;
  - (3) investigation of alternative water supplies including treated municipal wastewater; and
  - (4) methods whereby the County can help assure the long-term supply of irrigation water to its farmers.
- 8-bg. Explore and encourage concepts for water conservation and use of agricultural irrigation in order to extend existing supplies.
- 8-bh. Encourage local, State, and federal agencies to investigate and recommend methods of maintaining agricultural productivity with reduced amounts of toxic and nutritive chemicals which can damage water quality.



Levee Maintenance

- 8-bi. Seek State and federal grants to assist in levee maintenance and reconstruction projects.
- 8-bj. Identify local financing mechanisms for funding levee improvements.
- 8-bk. Approve land use policies and other regulations which conserve and protect existing levees.
- 8-bl. Encourage levee maintenance and construction that is sensitive to the preservation of riparian habitat, where feasible.

Other Programs

- 8-bm. Develop programs with the assistance of the County and other appropriate agencies and non-profit organizations to provide adequate housing for transient farm workers.
- 8-bn. Support the County Farm Advisor and the other county departments and special districts which provide services to agriculture, including educational programs that assist farmers and ranchers with financial planning and to effectively utilize available State and Federal programs.
- 8-bo. Promote cooperation between the County and cities to preserve agricultural land by requiring the County to pursue preservation agreements with cities.

**8.8 RENEWABLE ENERGY RESOURCES****INTRODUCTION**

Contra Costa County has energy resources that have yet to be fully utilized. There are two main sources of renewable energy available to the County: wind energy and solar power.

The Energy Resources Conservation and Development Commission of the State of California has identified the Altamont Pass area, including the Byron Hills portion of Contra Costa County, as an area with high wind potential. The private sector responded to that information and to federal and State tax incentives, which no longer exist, by moving rapidly into the wind energy business as a secondary use to agricultural pursuits. Applications for clusters of wind turbines are generally referred to as "Wind Farms." While the County has approved a substantial number of wind turbines and a large number of units have been constructed under those approvals, there is more property within the wind resource area that could be considered for additional wind farm development. This potential needs to be balanced against protection of the environmental resources of the southeast County area.

The County's mild climate makes solar heating feasible if structures are properly sited in developments and have their solar access protected. State legislation now exists to protect solar access to individual properties. Solar heating for swimming pools has become common; however, use of this resource is still limited.

Additionally, there are opportunities for conversion of municipal and other wastes to energy resources (e.g., methane). Furthermore, retrofitting existing structures can save substantial amounts of energy.

#### RENEWABLE ENERGY RESOURCES GOALS

- 8-K. To encourage the use of renewable resources where they are compatible with the maintenance of environmental quality.
- 8-L. To reduce energy use in the County to avoid risks of air pollution and energy shortages which could prevent orderly development.

#### MAP OF RENEWABLE ENERGY RESOURCE AREAS

Figure 8-3 shows the generalized boundaries of the wind energy resource areas based on materials developed for the State Energy Commission. The map identifies those areas that experience average wind speeds capable of being utilized for wind energy turbines (generally at least 15 mph at a height of 70 feet).

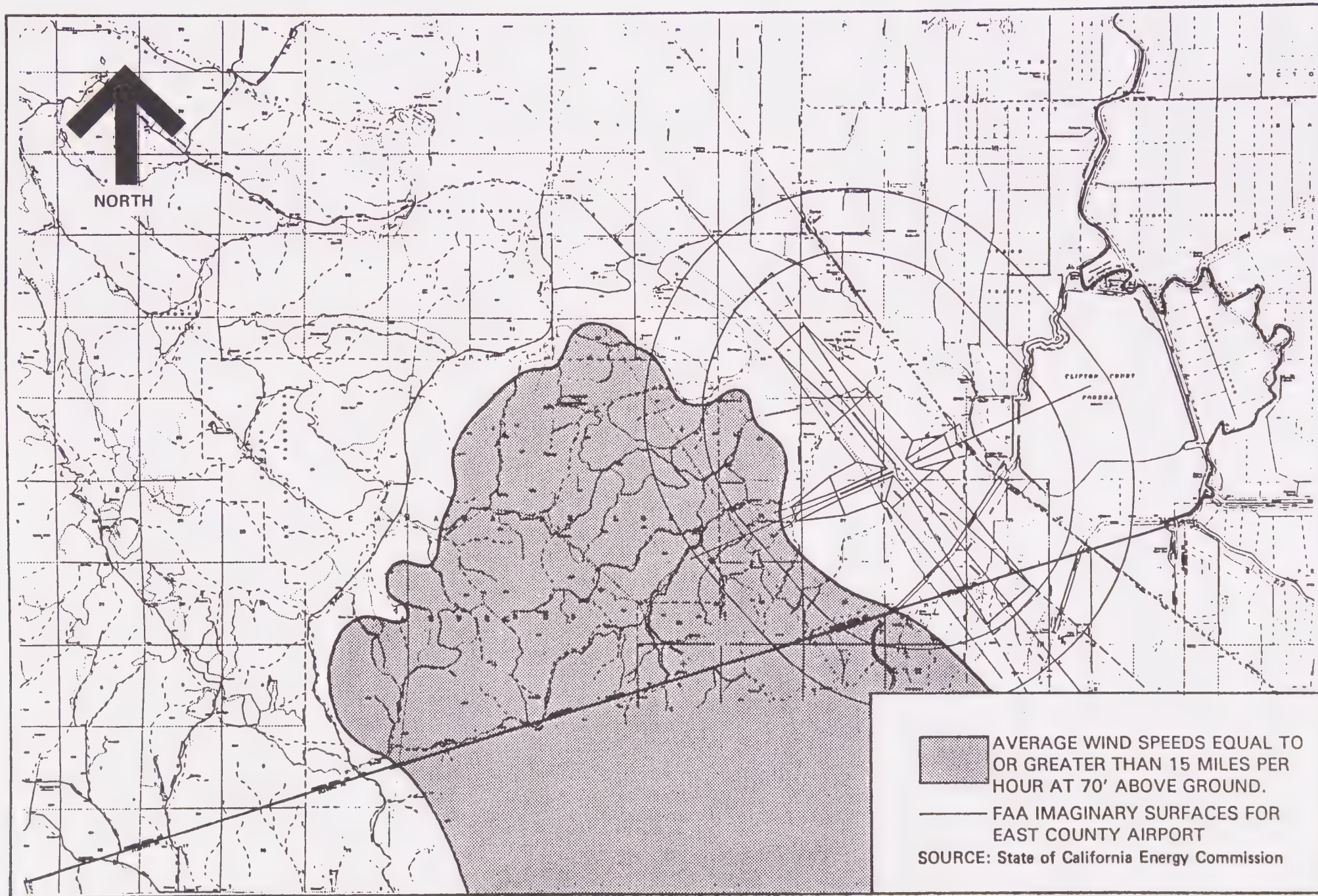
#### RENEWABLE ENERGY RESOURCES POLICIES

- 8-49. Commercial wind farms shall be restricted to the south Byron Hills portion of the County.
- 8-50. New residential uses should be discouraged within the wind energy areas (depicted in Figure 8-3), since clusters of wind turbines generate noise. Turbines could become a nuisance if new subdivisions or residences are allowed immediately adjacent to the existing turbines or on properties already approved for wind turbines.
- 8-51. All new wind turbine applications shall comply, at a minimum, with the site-specific criteria included in the wind energy conversion systems regulations in the County Ordinance Code.





Figure 8-3 WIND ENERGY RESOURCE AREA



- 8-52. Energy recovery projects, e.g. methane recovery from sewage (biomass), shall be encouraged, subject to adequate environmental protection.
- 8-53. The County shall cooperate with PG&E to retrofit existing homes with energy saving devices.

#### RENEWABLE ENERGY RESOURCES IMPLEMENTATION MEASURES

- 8-bp. Consider wind farm uses to be appropriate land uses within the Byron Hills resource area or along the periphery of the wind energy resource area, subject to careful review of the environmental impacts of specific wind farm proposals. Conformance with the ALUC's Structural Height Limit restrictions shall be required.
- 8-bq. If wind farms become obsolete or abandoned, they shall be entirely removed and the land should shall be returned to its natural pre-project condition.
- 8-br. Require bonding as a condition of project approval to ensure that obsolete or abandoned windfarms are returned to pre-project conditions. Also require periodic review of bond penalties by the County to determine that an appropriate amount is continuously held as surety.
- 8-bs. Prepare guidelines for solar design to be included as a revision to the subdivision ordinance.
- 8-bt. Include provisions for solar access within design review of projects.

### 8.9 MINERAL RESOURCE AREAS

#### INTRODUCTION

This section outlines appropriate policies for conserving and utilizing the County's mineral resources for current and future development, while ensuring that adverse environmental effects resulting from surface mining operations are minimized. Mineral extraction is important in Contra Costa County, as in other counties, because minerals such as crushed rock, sand, among others, supply the necessary components for local home building as well as for a diverse array of other industries. As such, the mineral industry is responsible for significant employment within the County.

To protect valuable mineral resources in California, the State Legislature has adopted the Surface Mining and Reclamation Act (SMARA), which includes a process called "classification-designation." The purpose of this process is to provide local agencies with information about the location, need and importance of various mineral resources within their jurisdiction, and to ensure this information is used in local land use decisions. The first mineral commodity which has been researched and designated by the State in each county is "construction aggregate," which includes sand, gravel and crushed rock.



The most important mineral resources that are currently mined in the County include crushed rock near Mt. Zion, on the north side of Mt. Diablo, in the Concord area; shale in the Port Costa area; and sand and sandstone deposits, mined from several locations, but focussed in the Byron area of southeast County.

## MAP OF MINERAL RESOURCES AREAS

Figure 8-4 maps the significant mineral resource areas, found within the unincorporated area of the County, which this plan will protect.

"Sector T" shown on Figure 8-4 is a regionally significant deposit of diabase located in the Mt. Zion area near Concord and Clayton. Diabase is an intrusive igneous rock which is used extensively for roadbase and as rip-rap to prevent streambank erosion. Both Lone Star and Kaiser quarries utilize this resource. Their continued operation is important to the County and the region.

Any expansion of the Mt. Zion quarrying operations will require a new County permit. The permit process shall include a complete analysis of impacts on Mt. Diablo State Park. Ultimately, upon closure of the mining operations, the quarried land should be considered for transfer to the State Park. Concord is considering residential development adjacent to the Mt. Zion quarries.

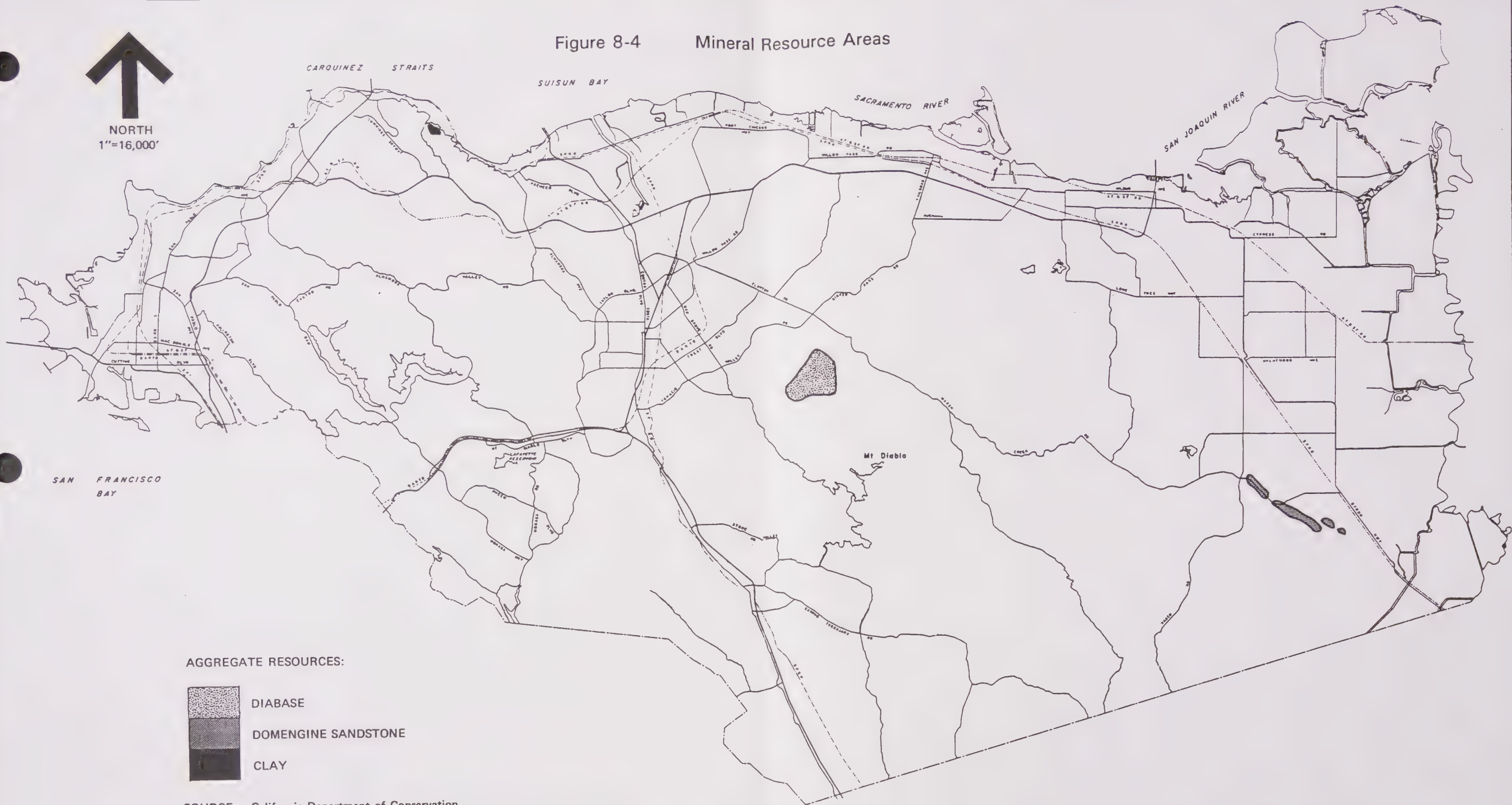
"Sector GG," identified on Figure 8-4, consists of a geological deposit of domesine sandstone, located just south of Camino Diablo and east of Vasco Road. This mineral resource is a valuable commodity for the continued economic vitality of Contra Costa County, as it is the sole deposit of this material in the State of California, and an important resource nationally. Domesine sandstone is used by Pacific Gas & Electric Company as trench backfill and is a primary ingredient in the manufacture of heat-resistant glass used in the national space program. The resource extends beyond the boundaries designated by the State. This plan calls for the protection of the entire sandstone resource area.

An additional area in the County which has a long history of mineral resource production is located near Port Costa. Mining in this area began at the turn of the century to support a brick manufacturing operation which is unique in the County, and one of only a few in the entire State. Mining and brick production have been continuous from 1905 to the present, under several different ownerships. In 1966, a lightweight shale aggregate facility was constructed. This resource area is designated for protection on this plan. The Carquinez Straits Regional Shoreline Park, now being developed in the area, surrounds the site. Efforts will be required to ensure the compatibility of park and recreation uses with the mining operations.





Figure 8-4 Mineral Resource Areas



SOURCE: California Department of Conservation  
Division of Mines and Geology  
Sacramento, CA

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## MINERAL RESOURCES GOALS

- 8-M. To ensure the continued viability of mineral extraction operations which are important to the County's economy.
- 8-N. To protect areas of identified valuable mineral resources from incompatible nearby land uses through zoning and other land use regulations.
- 8-O. To minimize and buffer the impact of surface mining activities on the surrounding land uses and the natural environment.

## MINERAL RESOURCES POLICIES

- 8-54. Mining and quarrying shall be a permitted use in certain privately owned areas which are in an open space designation in the General Plan (e.g. Open Space, Agricultural Lands, etc.) and which contain known mineral deposits with potential commercial value. These deposits include, but are not limited to, rocks, gravel, sand, salt and clay.
- 8-55. The shale mined at the Port Costa Materials Company site within an area designated as Heavy Industry and Agricultural Lands is compatible with this plan, although the long-term plan for the site, upon completion of quarrying, is for open space and park uses.
- 8-56. Incompatible land uses shall not be permitted within the mineral resource impact areas identified as containing significant sand and gravel deposits (as shown in Figure 8-4).

Incompatible uses are defined as land uses inherently incompatible with mining and/or uses that require a high public or private investment in structures, land improvements, and landscaping that prevent mining because of the higher economic value of the land and its improvements.

- 8-57. Future development in the vicinity of valuable mineral resource zones shall be planned and designed to minimize disturbance to residential areas or other sensitive land uses and to permit the safe passage of quarry trucks.
- 8-58. Development of compatible land uses shall be encouraged within 1,000 feet of the quarrying sites. Compatible uses include secondary industrial operations related to the quarry operation, recreation facilities, parks, agricultural uses, and permanent open space.
- 8-59. Opportunities to recycle resources and materials related to quarrying operations shall be encouraged where they are compatible with adjacent land uses.
- 8-60. Reclamation plans prepared for the closure of quarries shall include conditions addressing the future use of the property, and a condition of the reclamation plan shall assure that future use.
- 8-61. Any proposals to expand existing quarries, or to create new quarries, adjacent to Mt. Diablo State Park shall carefully analyze impacts upon the park.

## MINERAL RESOURCES IMPLEMENTATION MEASURES

- 8-bu. Rezone designated mineral resource areas to stringent agricultural zoning designations (A-20, A-40, or A-80) to protect them for future recovery and from incompatible land uses.
- 8-bv. Establish a buffer zone around designated resource areas which will be rezoned to restrictive agricultural zones of A-20, A-40 or A-80.
- 8-bw. Encourage the recording of notices on property titles in mineral resource areas identifying the presence of important mineral resources.
- 8-bx. Limited residential or ranchette development of mineral resource properties may be appropriate, but residential use shall be identified as secondary to mineral operations and will not be allowed to preclude the full utilization of identified mineral resources. Any nearby residential use will be permitted conditionally after recognizing the probable expansion of mineral operations and accepting the possible nuisance and inconvenience associated with mineral operations.
- 8-by. Require the posting of bonds for all new mining and quarrying permits to guarantee timely and faithful performance of reclamation and mining plans.
- 8-bz. In analyzing the environmental effects of mining operations, the County shall consider, at a minimum, the following concepts in granting a new permit:
  - (1) natural vegetation for buffering;
  - (2) adequate setbacks;
  - (3) central location of processing equipment and equipment storage;
  - (4) dust control;
  - (5) adequate access roads;
  - (6) erosion control;
  - (7) revegetation and re-establishment of natural appearing features on the site;
  - (8) ultimate land use;
  - (9) hours of operation;
  - (10) night lighting;
  - (11) security fencing;
  - (12) noise impacts; and
  - (13) protection of water quality.
- 8-ca. Work with the Cities of Concord and Clayton to protect the aggregate resources around Mount Zion.

## 8.10 SOIL RESOURCES

### INTRODUCTION

Contra Costa County is within the central Coast Range Geomorphic Province of California. This province consists of a northwest-trending series of mountain ranges and intermontane valleys. Unconsolidated alluvium, terrace deposits and bay mud occupy the lowland areas. These earth materials consist of sand, silt, clay and

gravel of variable density and strength. Alluvial and terrace deposits occupy the intermontane valleys and lower foothills and Bay muds occupy the eastern northern and northwestern margins of the County. Figure 8-5 shows the County's general soils characteristics.

Soils of the region can be classified in three broad categories: 1) Lowland Soil Associations, 2) Tidal Flat-Delta-Marsh Lowland, and 3) Upland Soil Associations. Each is briefly described below.

- 1) Lowland Soil Associations. The Soil Conservation Service recognized six central lowland soil associations. Most of these soil associations are slowly to very slowly permeable, highly expansive and corrosive with slight erosion hazards.
- 2) Tidal Flat-Delta-Marsh Lowlands. The SCS describes three soil associations in the lowlands of the Tidal Flat-Delta-Marsh area. Soils of these associations are highly expansive, very highly corrosive, and moderately to slowly permeable.
- 3) Upland Soil Associations. Five upland soil associations were recognized by the SCS. These associations are generally highly expansive and corrosive with moderate to slow permeability.

Different soil types have varying levels of susceptibility to erosion, but all soils benefit from conservation management practices. When erosion occurs, topsoil is lost resulting in reduced crop productivity and sedimentation problems downstream. In turn, sedimentation can fill waterways, diminish water quality, and damage sensitive habitats. Erosion occurs when high rainfall, lack of cover, fragile soils, and steep slopes combine. Urbanization, development activities, recreation, agricultural and logging practices increase erosion.

Soil loss in the County is affected by land use, wind erosion and water erosion. Wind erosion is the greatest factor in soil loss in the Delta area. Grain crops in the Tassajara region of the County are subject to water erosion. Soils in hillside grazing areas are generally stable, but have been stressed recently by several years of drought. Grassland vegetation, which stabilizes hillsides, lacks the root structure to hold soils effectively in a severe rainstorm (over two inches precipitation). However, as annual rainfall returns to pre-drought averages, the root structures will repair and the hills will stabilize.<sup>1</sup>

Conversion of agricultural lands to housing or other development temporarily renders exposed soil vulnerable to erosion. This condition improves and stabilizes following construction, if proper construction drainage and landscaping practices have been followed.



## AGRICULTURAL SOILS

Less than 40 percent of the land in Contra Costa County consists of Class I, II, and III soils. Class I and II soils are considered "prime," or the very best soils for farming.<sup>2</sup> Class II soils are found on the Diablo-San Ramon Valley floor, a large part of the Pittsburg-Antioch Plain, throughout the San Joaquin Delta region, and along the stream channels of many smaller valleys in the Briones Hills and Diablo Range. Because these areas are located along the traditional transportation corridors, urban development has also moved much of this Class II land from production, most recently in the Pittsburg-Antioch area.

The largest remaining agricultural area with Class I and II soils includes approximately 17,000 acres centered around Brentwood in East County. The area of prime soils extends westward into the Deer Creek, Marsh, and Kellogg valleys, southward to the town of Byron, extends eastward to Discovery Bay, and northward along the ATSF railroad tracks into Oakley. Figure 8-5 illustrates the prime soils types in the East County where most of the impacts of the proposed County General Plan will occur. Class I and II lands in the Soil Conservation Land Use Capability Classification is a factor which was used in establishing the ULL.

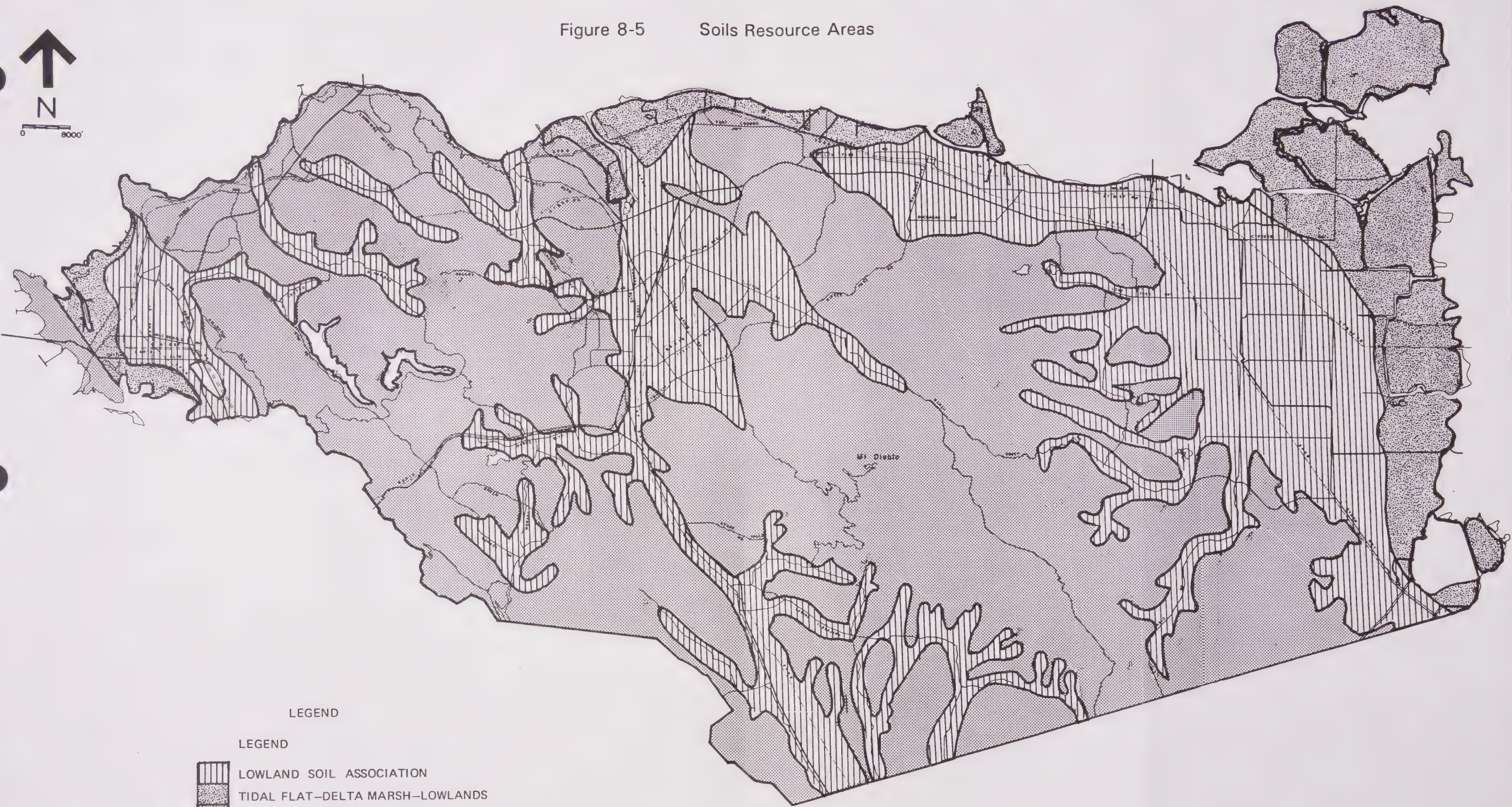
Important soil types in the Brentwood area include Brentwood clay loam (designated "Bb" on the figure) which is Class I soil; Brentwood clay loam, wet ("Bc," Class II); Capay clay, 0 to 2 percent slopes ("CaA," Class II); Capay clay, wet, 0 to 2 percent slopes ("CbA," Class II); and Rincon clay loam, 0 to 2 percent slopes ("RbA," Class II). Most of the Class I and II soils in East County are still under agricultural production although significant development pressure exists in the area.

Large areas of Class III soils are found on the islands of the San Joaquin Delta and on lands in the growing Oakley community. Most of Oakley is composed of Class II Delhi sand, described by the U.S. Soil Conservation Service as "excessively drained soils" where runoff is slow or very slow. Delhi sand is used to grow irrigated almonds, vineyards, and some walnuts. The predominant Class III soils found on Delta islands are from the Kingile and Rindge associations, which are described as "very poorly drained organic soils" used primarily for irrigated field corn, milo, asparagus, tomatoes and pasture.<sup>3</sup>

The next category of soils, Class IV soils, tend to be poorly drained, have excess salts, or are too steep for continuous cultivation. Where cultivable, as in East County and in the southern Diablo Range region, they are suited to irrigated



Figure 8-5      Soils Resource Areas



LEGEND

LEGEND

- LOWLAND SOIL ASSOCIATION
- TIDAL FLAT-DELTA MARSH-LOWLANDS
- UPLAND SOIL ASSOCIATION

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pasture and dry farming of grains such as barley. Where too steep for cultivation, as in the foothills of the Diablo Range, Class IV soils are excellent grazing land less subject to erosion and overgrazing than other range areas.

The role of climate in mitigating some of the shortcomings of the soil characteristics in California makes the distinction between prime and non-prime less clear. In Contra Costa County, where the influence of coastal fog is felt in the western and central regions, the growing season in areas such as Tassajara Valley and Morgan Territory is extended and even Class IV lands may support dry field crops.

#### Maps and Inventory of Soil Resource Areas

Figure 8-5 illustrates the location of soil resources found in the County. The soil resource preservation policies found in this section focus on the soil resources and important agricultural soils of the County.

#### SOIL RESOURCES GOALS

- 8-P. To encourage the conservation of soil resources to protect their long-term productivity and economic value.
- 8-Q. To promote and encourage soil management practices that maintain the productivity of soil resources.

The following policies and implementation measures, in addition to those identified in the Agricultural Resources Section, shall be used to carry out these goals.

#### SOILS RESOURCES POLICIES

- 8-62. The County shall protect soil resources within its boundaries.
- 8-63. Erosion control procedures shall be established and enforced for all private and public construction and grading projects.
- 8-64. The County shall support and encourage existing local, State, and Federal soil conservation and restoration programs within its borders.
- 8-65. In the absence of more detailed site-specific studies, determinations of soil suitability for particular land uses shall be made according to the Soil Conservation Service's Soil Survey of Contra Costa County.
- 8-66. The existing County slope map shall be used to identify areas in the County where slope poses severe constraints for particular land uses.
- 8-67. Lands having a prevailing slope above 26 percent shall require adequate special erosion control and construction techniques.

- 8-68. Lands having a high erosion potential as identified in the Soil Survey shall require adequate erosion control methods for agricultural and other uses.

## SOILS RESOURCES IMPLEMENTATION MEASURES

- 8-cb. Apply the appropriate land use designations to areas with productive agricultural soils.
- 8-cc. Annually review the California Department of Conservation's updated Important Farmland's Map and the amount of land in the County converted to and from agricultural use.
- 8-cd. Design discretionary projects so that structures and roads are not located on slopes of 26 percent or greater. This requirement is not intended to preclude existing parcels as building lots if Health Department and Building Department requirements can be met.

### Development Review Process

- 8-ce. Include erosion control measures for any discretionary project involving construction or grading near waterways or on lands with slopes exceeding 10 percent.
- 8-cf. Encourage agricultural land owners to work closely with the U.S. Soil Conservation Service and local Resource Conservation Districts to reduce soil erosion and to encourage soil restoration.
- 8-cg. Require a soil conservation program to reduce soil erosion impacts for discretionary projects which could increase waterway or hillside erosion. Design improvements such as roads and driveways to retain natural vegetation and topography to the extent feasible.
- 8-ch. Retain natural vegetation and topography to the extent economically feasible for any discretionary project improvements near waterways or in areas with a high risk of erosion as noted in the Contra Costa County Soil Survey.
- 8-ci. For discretionary projects, prepare and submit to the County Board of Supervisors an erosion and sediment control plan to be included as part of the project.
- 8-cj. Continue to enforce the Uniform Building Code to reduce erosion and slope instability problems.

## 8.11 OIL AND GAS RESOURCES

### INTRODUCTION

Contra Costa County is one of the leading counties in the State in terms of natural gas production. The County also has a small volume of oil production. The most productive oil and gas fields are concentrated in the eastern portion of the County. The area contains the Brentwood, Oakley, East Brentwood and Dutch Slough fields and a portion of the Rio Vista field, the largest of its type in the State. These fields are all located north of the City of Brentwood and east of Antioch. The only other field of significance, Los Medanos, is located in the hilly area

north of Route 4, between Bay Point and the Concord Weapons Station. Other smaller resource areas are scattered throughout the County.

The production of oil and gas from wells is an important secondary use of land in the County. The policy issues on this matter deal more with regulation on the extraction of this resource than the appropriateness of use. Issues which need to be dealt with include noise (including drilling, operation, and production enhancement), aesthetics, access to the wells and the impact of equipment on public roads. Efforts need to be made to encourage unified drilling sites to minimize these land use impacts. Natural gas storage areas, such as the Los Medanos Gas Storage field, should be encouraged as more efficient than using surface storage tanks.

#### OIL AND GAS RESOURCES GOALS

- 8-R. To achieve utilization of oil and gas resources in a manner beneficial to all County residents.
- 8-S. To minimize the impact of oil and gas extraction activities on the surrounding land uses and the natural environment.

#### OIL AND GAS RESOURCES POLICIES

- 8-69. The production of gas and oil resources shall be encouraged as a way to support the agricultural viability of rural areas.
- 8-70. New wells shall be reviewed and approved in a fashion to minimize noise, aesthetic and public safety problems.
- 8-71. The potential impacts of oil and gas extraction on the subsistence of land, especially land near bodies of water and in the Delta, should be investigated. If necessary, special regulations should be proposed and applied to existing operations.
- 8-72. New wells shall not be allowed to be drilled in wetland areas.
- 8-73. Where safety can be assured, the storage of gas in underground natural basins shall be considered preferable to above ground storage tanks.

#### OIL AND GAS RESOURCES IMPLEMENTATION MEASURES

- 8-ck. Develop standards for resolving conflicts between proposed wells and residences in terms of setbacks, allowable noise, etc.
- 8-cl. Review the need for impact fees for new well permits on area roads.
- 8-cm. Fund and monitor the subsidence studies currently underway to better understand the impacts of continued drilling of new wells and pumping of these resources.



- 8-cn. Review procedures for well abandonment to assure that the land is returned to its natural surface condition.
- 8-co. Utilize the Wetlands Protection Map from the U.S. Department of Fish and Wildlife identifying areas subject to prohibition of oil and gas well drilling.

## 8.12 WATER RESOURCES

### INTRODUCTION

Contra Costa County has a moderate climate, similar to a Mediterranean climate. Measurable rainfall recorded annually in the City of Richmond averages about 21.8 inches per year, with the majority falling between October and April. Average temperatures are mild, and generally range between 50 and 66 degrees F in Richmond.

The County is bounded by San Francisco Bay and San Pablo Bays to the west, by Suisun Bay and the channels of the (Sacramento and San Joaquin Rivers), and the south by Alameda County. The San Francisco Bay Delta System (including San Pablo Bay) is generally regarded as the most important water body in California. It is used extensively for both recreational and commercial purposes, and supports a diverse flora and fauna. Water from about 40 percent of the land in California drains into the Bay and comprises most of the State's agricultural and urban supplies.

The San Francisco Bay has been greatly altered from its natural conditions by human activities. The quality of waters of the San Francisco and San Pablo Bays vary seasonally. For most of the year, water quality is similar to that of the Pacific Ocean. From December through April, water quality is affected by freshwater inflow from the Sacramento-San Joaquin Delta and from other local, smaller tributaries that drain urbanized portions of Contra Costa County and the entire Bay Area.

Water quality in the Delta is affected by a multitude of factors including upstream reservoir releases; tidal changes; the discharge of agricultural diversers; and the export rates of the State Water Project and the Central Valley Project. A number of statutes have been enacted specifically regarding the Delta. The California State Water Resources Control has been conducting hearings regarding the Bay/Delta system and the future of water diversion from this system.

The California State Regional Water Quality Control Board (RWQCB), San Francisco Bay Region, is the government agency responsible for protecting the health of San Francisco Bay. A water quality control or "basin plan" has been prepared that serves as a blueprint for water pollution control activities in the Bay. The basin plan

identifies a number of beneficial uses of the Bay that must be protected, including non-contact recreation; wildlife habitat; preservation of rare and endangered species; estuarine habitat; warm freshwater and cold freshwater fish habitat; fish spawning and migration; industrial service supply; navigation; and commercial and sport fishing.

All of Contra Costa County's water drains either directly or indirectly into the Bay/Delta system. Water from the western, urbanized portion of the County drains directly into San Francisco Bay or San Pablo Bay, while that from the northern and eastern portions drain into Suisun Bay and the Delta river channels, eventually flowing into San Pablo and San Francisco Bays. The south-central portion of the County is within the Alameda Creek drainage basin; this area's water drains south to Alameda Creek, then west to the San Francisco Bay.

Municipal water supply is provided to Contra Costa County by two main water purveyors. East Bay Municipal Utility District (EBMUD) provides water service to a large portion of the East Bay, including the urbanized western portion of the County (Crockett, Richmond, El Cerrito, etc.), as well as to central portions of the County, including Orinda, Lafayette, Walnut Creek, Danville and San Ramon. Most of EBMUD's water comes from Pardee Reservoir on the Mokelumne River, located in the foothills of the Sierra Nevada. EBMUD provides water of a very high quality.

The Contra Costa Water District (CCWD) provides water service to most of the urban remainder of the County. CCWD provides raw (untreated) water to the cities of Antioch, Pittsburg and Martinez, and to the Oakley Water District and Bay Point (private company). In addition, CCWD provides treated water to the cities of Concord, Pleasant Hill, Walnut Creek, and Clayton.

CCWD obtains its water from the Contra Costa Canal, which is part of the Central Valley Project. Water for the canal is diverted from the delta at Rock Slough, eight miles east of Antioch. CCWD operates the Contra Loma Reservoir (storage capacity 2,095 acre-feet) and the Martinez Terminal Reservoir (capacity 268 acre-feet). Until the early years of this century, Contra Costa County relied on groundwater and local surface water to fulfill its needs. Now, however, virtually all of the domestic water used within the County is from the Delta.

All wastewater generated within the developed portions of the County is treated by conventional methods; this treated wastewater is then discharged into the Bay/Delta system through submarine outfalls. Municipal dischargers are issued permits from the RWQCB, and include Central Contra Costa Sanitary District, Delta-Diablo Sanitation District, West Contra Costa Sanitary District, City of Richmond, Mountain View Sanitary District, Rodeo Sanitary District, and the City of Pinole. All municipal dischargers of treated wastewater within the County generally have good records of compliance with their discharge permits, except Richmond which has

had problems with its wet-weather discharges. Other, lesser developed portions of the County utilize septic systems for their wastewater disposal. The water quality of creeks within urbanized areas has been degraded by the presence of high levels of suspended solids, together with traces of contaminants associated with the operation of motor vehicles such as oil and grease, gasoline and other hydrocarbons, lead, rubber, etc. No serious water quality problems exist within the County; however, an unknown quantity of hazardous wastes are currently disposed of by illegal or unsafe means. These disposal practices could lead to surface and groundwater contamination that may not be detected.

Certain portions of the County are more prone to flooding than other portions. In general, the low-lying areas adjacent to San Francisco, San Pablo and Suisun Bays, and the eastern portion of the County near the San Joaquin River are the most susceptible to flooding.

#### Urban and Rural Creeks

When Contra Costa County was sparsely populated and predominantly rural, creeks and streams flowed uninterrupted from the coastal hills to the Bay and Delta. These watercourses supported a wide variety of plant, animal, and aquatic life. Riparian vegetation and streamside habitats minimized erosion, sustained perennial streams, contributed to groundwater reserves, moderated temperature extremes and provided an attractive and pleasant environment. It is of benefit to County residents to preserve vestiges of this pre-settlement environment and to work toward re-establishing this environmental heritage.

As agricultural land in portions of the County was converted to urban uses, permeable ground surfaces were replaced with impervious surfaces. Paving, roofs, and efficient drainage systems reduced the proportion of rainfall percolating into the ground and increased the volume and velocity of surface runoff carried to the creek channels. This resulted in increased flood frequency and severity, channel cutting and loss of vegetation in upper watersheds, and silting in lower channels.

Creeks and streams were relocated and realigned to accommodate increased flows. Channels were increased in width and depth and lined with concrete or rip-rap. Creeks were placed in conduits and culverts. Although these improvements have been effective in transporting stormwater runoff and in reducing flooding and property damage, these benefits have come at the expense of natural channels and native riparian habitat, which are difficult to replace and are sometimes irreplaceable.



Traditionally, the more efficient the drainage system feeding into a natural watercourse, the greater the damage to natural waterways and streamside vegetation and the greater the downstream flood damage risk. The continued use of traditional drainage facilities in individual development projects exacerbates these problems. Many undeveloped properties lie upstream from established urban development. Each new development project which increases peak runoff, although seemingly insignificant, contributes to a future need to make improvements to existing downstream public flood control facilities and natural channels at substantial cost to county residents. The use of alternate stormwater management techniques such as the floodplain, the levied floodway, the bypass channel, and the detention basin can either lessen or eliminate completely the need for these improvements, reducing public costs and providing a more diverse and attractive environment.

While it may be desirable to keep all of the remaining creeks and streams in their natural state, this is not always possible. Within existing developed areas, structural modifications to watercourses are often the only viable alternative. The shortage of available land within a built-up urbanized area, as well as its high cost, may rule out the possibility of keeping a watercourse in its natural state. Where this is the case, alternate structural approaches can be utilized which are designed to be compatible with their environment. Instead of rip-rap and concrete, slope protection devices can be used to stabilize banks. Landscaping can also be used to soften the visual impact of structurally modified watercourses.

Control of flooding is not the only drainage concern. With increased development and stormwater runoff, a wide variety of nutrients and toxic substances have been introduced into county waters. Nutrient wastes in the form of sewage, agricultural fertilizers, and manure lead to reduced dissolved oxygen in surface waters and limit the capacity of water to support aquatic organisms. Toxic substances, such as industrial wastes, insecticides and herbicides, can poison wildlife and become concentrated in the food chain. Both types of pollutants can adversely affect the quality of groundwater.

Erosion and sedimentation often inflict heavy public costs for flood control, harbor and channel dredging, post-flood clearing and private property damage, besides damaging aquatic life and carrying toxic substances into public and private water supplies. Design and construction techniques have been developed which are cost-effective and essential to erosion and sedimentation reduction.

There is also a need to provide enhanced opportunities for public access to creeks, streams, and drainage channels, where conditions and liability constraints permit. Total county population will continue to increase and with it the demand for recreation facilities will grow. Drainage features which can be made into parks or open

space, or incorporated as assets into new development projects, will be used and appreciated by present and future county residents.

The Contra Costa County Flood Control and Water Conservation District is empowered to control flood and storm waters throughout the county. Even though the district has no direct influence over the County or the cities regarding land use and planning matters, the district does develop drainage plans for entire watersheds which cross jurisdictional boundaries. These drainage plans specify the flood control improvements needed to serve planned development in the area and are used to set drainage fees assessed against new development.

A more complete discussion of adopted and proposed drainage plans, as well as numerous flood control goals, policies and implementation measures, are included in the "Drainage and Flood Control" section of the Public Facilities/Services Element (Chapter 7). Readers should note that there is a great deal of overlap between these two sections of the General Plan; some goals and policies are repeated in both sections. Both this section and the "Drainage and Flood Control" section in Chapter 7 should be consulted together for a full understanding of County policies regarding flood control, waterways and riparian areas.

#### WATER RESOURCES GOALS

- 8-T. To conserve, enhance and manage water resources, protect their quality, and assure an adequate long-term supply of water for domestic, fishing, industrial and agricultural use.
- 8-U. To maintain the ecology and hydrology of creeks and streams and provide an amenity to the public, while at the same time preventing flooding, erosion and danger to life and property.
- 8-V. To preserve and restore remaining natural waterways in the county which have been identified as important and irreplaceable natural resources.
- 8-W. To employ alternative drainage system improvements which rely on increased retention capacity to lessen or eliminate the need for structural modifications to watercourses, whenever economically possible.
- 8-X. To enhance opportunities for public accessibility and recreational use of creeks, streams, drainage channels and other drainage system improvements.

#### GENERAL WATER RESOURCES POLICIES

- 8-74. Preserve watersheds and groundwater recharge areas by avoiding the placement of potential pollution sources in areas with high percolation rates.
- 8-75. Preserve and enhance the quality of surface and groundwater resources.
- 8-76. Ensure that land uses in rural areas be consistent with the availability of groundwater resources.



- 8-77. Provide development standards in recharge areas to maintain and protect the quality of groundwater supplies.

#### Policies to Protect and Maintain Riparian Zones

- 8-78. Where feasible, existing natural waterways shall be protected and preserved in their natural state, and channels which already are modified shall be restored. A natural waterway is defined as a waterway which can support its own environment of vegetation, fowl, fish and reptiles, and which appears natural.
- 8-79. Creeks and streams determined to be important and irreplaceable natural resources shall be retained in their natural state whenever possible to maintain water quality, wildlife diversity, aesthetic values, and recreation opportunities.
- 8-80. Wherever possible, remaining natural watercourses and their riparian zones shall be restored to improve their function as habitats.
- 8-81. Fisheries in the streams within the County shall be preserved and re-established wherever possible.
- 8-82. Riparian habitat shall be protected by providing for channel cross-sections adequate to carry 100-year flows, as per policies contained in the Public Facilities/Services Element. If it is not possible to provide a channel cross section sufficient to carry the 100-year flow, then detention basins should be developed.
- 8-83. The remaining willow riparian areas in East County shall be protected from intensive cattle grazing.
- 8-84. Riparian resources in the Delta and along the shoreline shall be protected and enhanced.

#### Policies for New Development Along Natural Watercourses

- 8-85. Natural watercourses shall be integrated into new development in such a way that they are accessible and provide a positive visual element.
- 8-86. Existing native riparian habitat shall be preserved and enhanced by new development unless public safety concerns require removal of habitat for flood control or other public purposes.
- 8-87. On-site water control shall be required of major new developments so that no increase in peak flows occurs relative to the site's pre-development condition, unless the Planning Agency determines that off-site measures can be employed which are equally effective in preventing adverse downstream impacts.
- 8-88. New development which modifies or destroys riparian habitat because of needed flood control, shall be responsible for restoring and enhancing an equivalent amount of habitat within or near the project area.
- 8-89. Setback areas shall be provided along natural creeks and streams in areas planned for urbanization. The setback areas shall be of a width adequate to allow maintenance and to prevent damage to adjacent structures, the natural channel and associated riparian vegetation. The setback area shall be a minimum of 100 feet; 50 feet on each side of the centerline of the creek.
- 8-90. Deeded development rights for lands within established setback areas along creeks or streams shall be sought to assure creek preservation and to protect adjacent structures and the loss of private property.



- 8-91. Grading, filling and construction activity near watercourses shall be conducted in such a manner as to minimize impacts from increased runoff, erosion, sedimentation, biochemical degradation, or thermal pollution.
- 8-92. Revegetation of a watercourse shall employ native vegetation, providing the type of vegetation is compatible with the watercourse's maintenance program and does not adversely alter channel capacity.
- 8-93. Particular care shall be exercised by development proposals to preserve and enhance riparian corridors along creeks which connect to the freshwater marsh segments of coastal areas in the North Central and East County areas.
- 8-94. Applications to expand marine uses shall be carefully evaluated to ensure that a gain, not a loss, of any associated riparian vegetation will result. Runoff of pollutants into marsh and wetland areas from nearby urban development, should be prevented by prohibiting any storm sewer outflow pipe in such areas and by requiring berm or gutter structures at the outer boundary of the buffer zones which would divert runoff to sewer systems for transport out of the area.

## WATER RESOURCES IMPLEMENTATION MEASURES

### Riparian Resources Inventory

- 8-cp. Work with appropriate agencies to inventory the County's riparian resources and to identify areas warranting preservation and enhancement.

### Zoning and Code Revisions

- 8-cq. Review and revise the County ordinance code to provide for the protection and enhancement of watercourses and riparian vegetation, as outlined in the above policies (e.g. building setback requirements, regulations limiting the removal of trees and vegetation, etc.).

### Other Programs

- 8-cr. Develop a program that fosters the participation of public agencies, private organizations and individuals in the development of watershed management practices that reduce soil loss and excessive runoff (i.e. control of grazing in upper watersheds, timing of release of water from upstream dams, revegetation of upper watersheds), and that minimize the effect on downstream areas.
- 8-cs. Develop a program for the restoration of riparian vegetation in rural creeks where grazing activities are reducing the extent of the vegetation and are eroding channel banks.
- 8-ct. Develop guidelines for creek maintenance practices which assure that native vegetation is not removed unnecessarily. These guidelines should also assure that maintenance is scheduled to minimize disruption of wildlife breeding practices.
- 8-cu. Re-evaluate the flood control drop structures and long spillways that have been constructed in many of the creeks in North Central County (Walnut Creek, Concord, and Pleasant Hill) to determine the

feasibility of constructing fish bypass facilities which would allow anadromous species access to inland spawning sites.

#### Development Review Process

- 8-cv. Review all public and private projects adjacent to and within creeks and streams to determine their conformance with the policies of this General Plan.
- 8-cw. As a priority, define and implement a development review process for new projects that ensures conformance with the stream and riparian corridor protection policies of this plan.
- 8-cx. During the review of proposed development plans, the County staff shall require a building setback of at least 100 feet along natural creeks and streams, and seek to obtain deeded development rights on lands within setback areas.
- 8-cy. New parcels which are created shall include adequate space outside of the watercourses' setback areas for pools, patios, and appurtenant structures to ensure that property owners will not place improvements within the areas which require protection.
- 8-cz. Through the environmental review process, the likely effects of construction and other proposed activities on nearby natural watercourses and related open space shall be determined. Measures shall be identified that will mitigate these effects and encourage the preservation of natural waterways and related open space. Such measures may include, but are not limited to:
  - (1) Clustering of buildings and other site design features;
  - (2) Restoration or enhancement of other riparian habitat within or near the project area; and
  - (3) Purchase of development rights for lands within other stream setback areas.
- 8-da. When alteration of streambanks or streambeds is proposed, notify the State Department of Fish and Game in accordance with their authority under State law and/or when their assistance is needed.
- 8-db. As a condition of approval for discretionary permits which intensify cattle grazing, 100-foot buffer zones along creek systems should be declared "riparian preserves"; establish cooperative agreements with land owners to fence off the areas from livestock; and, institute appropriate planting programs, as needed to replace vegetation. If necessary, install simple gravity flow pipeline systems to transport water from pool areas in the creek to water trough sites for cattle outside the riparian zone.
- 8-dc. Require proposed recreation or housing projects which utilize the shoreline and water resources of the Delta to create slough systems with significant riparian plant communities equal in size to the project area itself. Prohibit construction of barren waterways.
- 8-dd. Require large industrial projects and expansions in the coastal regions of Antioch and Pittsburg to preserve and, if necessary, create a riparian buffer zone of at least 100 feet between the high tide line and the development edge. Apply conditions of project approval that minimize any surface runoff or storm sewer outflows from contaminating the riparian buffer zones.
- 8-de. Require groundwater monitoring programs for all large-scale commercial and industrial facilities using wells.

- 8-df. Require proof of adequate groundwater in areas not served by municipal water purveyors. Require test wells or the establishment of community water systems in these areas. Deny discretionary applications unless a geologic report establishes that groundwater supplies are adequate and will not be adversely impacted by the cumulative amount of additional development.
- 8-dg. Review and comment on projects and environmental documents that propose wastewater disposal methods which discharge into natural waterways. Request reclamation conservation and re-use programs to minimize discharges and protect water quality and aquifer recharge areas.
- 8-dh. Review of subdivisions using septic systems shall be conducted by the County's Environmental Health Department to ensure that leachates do not contaminate groundwater recharge areas. Consider on-site wastewater management districts in important recharge areas.
- 8-di. Actively pursue the abatement of failing septic systems near waterways.
- 8-dj. Encourage the construction of wastewater disposal systems designed to reclaim and re-use treated wastewater on agricultural crops, and for other irrigation and wildlife enhancement projects.

### 8.13 HARBORS

#### INTRODUCTION

The Port of Richmond is located at the western edge of Contra Costa County, approximately nine miles east of the Golden Gate Bridge. The Port consists of an Outer Harbor about five miles in length, and an Inner Harbor, which covers a distance of about 3.75 miles in length. The Outer Harbor faces natural, deepwater in San Francisco Bay; the Inner Harbor has been dredged from deep water in San Francisco Bay through shallow flats and marshlands.

Port of Richmond facilities consist of piers, wharves and docks. Commodities handled at the Port include bulk liquids, bulk dry and scrap metal cargoes, gypsum rock, vehicles, and brake bulk. Container handling was initiated at a new Port of Richmond facility during the early 1980s. Annual tonnage handled by the Port during 1989 exceeded 301,000,000 short tons. Potential expansion plans propose importing approximately 200,000 to 500,000 tons of Nevada Cement annually at Port of Richmond Terminal B. The Port is also encouraging growth by pursuing additional accounts.

Several small craft and recreational harbors or marinas are located along San Francisco Bay, Carquinez Strait, Suisun Bay, and the Sacramento River within Contra Costa County. Commercial fishing vessels and pleasure craft are served by these.



## HARBOR GOALS

- 8-Y. To promote safe, convenient and appropriate water transportation for Contra Costa County.
- 8-Z. To encourage the continued operation, orderly expansion and economic viability of harbor facilities within the County.

## HARBORS POLICIES

- 8-95. Expansion of the Port of Richmond is recognized. Existing harbors or their facilities shall mitigate adverse environmental impacts on shoreline and marshland habitats within unincorporated areas of the County.
- 8-96. Land use activities in the immediate vicinity of harbors and adjacent facilities shall be compatible with the continued optimum commercial and recreational operations of the harbor.
- 8-97. The County shall oppose construction or operation of mooring facilities posing significant hazards or threats to Bay or Delta resources.

## HARBOR IMPLEMENTATION MEASURES

- 8-dk. Encourage coordination between the Port of Richmond and other local, State and Federal agencies to ensure that expansion does not adversely impact habitats.
- 8-dl. Review proposed port and marina expansion projects with regard to potential affects on shoreline and marshland habitat, along the Bay and Delta.

## 8.14 AIR RESOURCES

### INTRODUCTION

Although not required by law, air quality considerations within a General Plan provide benefits in terms of improved local and regional air quality. There is no State or local agency with responsibility for air quality planning at the local level. The State Air Resources Board has Statewide responsibility for air quality, and the Bay Area Air Quality Management District has permitting authority for stationary air pollutant sources in the region. These agencies' participation in local land use planning is normally limited to commenting on Environmental Impact Reports.

Consideration of air quality planning at the local level has taken on a new importance in recent years. Since about 1970 continuous progress has been made in improving air quality in virtually all areas of the nation. Stringent controls on automobiles and stationary sources of air pollutants such as factories and refineries, as well as controls on area sources such as paints, solvents and gasoline stations have resulted in improved air quality despite

increases in population, employment and vehicular traffic. These controls have not resulted in all air quality standards being attained in the Bay Area, however.

Past efforts at improving air quality have focused on "hardware" type solutions such as requiring pollution abatement equipment for industrial sources or requiring catalytic converters on new automobiles. The simplest and most cost-effective hardware-type air pollution control measures were those first implemented; future measures of this type will provide diminishing returns.

Local air quality planning offers another means of addressing the air pollution problem. Future air quality will be partially determined by local land use and transportation decisions. Judicious land use and transportation planning at the city and county level represents another means of improving air quality on both the local and regional scale. Such planning can keep a balance between growth rates and improvements to the transportation system, reduce long distance commuting, encourage and support non-auto transportation, and reduce future land use conflicts related to air pollution.

In a planning sense, air quality is closely related to several other areas within the General Plan. Listed below are other Elements of the Plan which contain policies and implementation measures that are consistent with efforts to improve air quality and are considered part of the Air Quality component of the General Plan.

- **Transportation and Circulation Element:**
  - circulation phasing and coordination
  - roadway routing and design improvements
  - alternative transportation and circulation systems
- **Land Use Element:**
  - jobs/housing balance, community boundaries (Urban Limit Line)
  - growth management
  - standards for timing of growth with the Urban Limit Line
- **Safety Element:**
  - protection from hazardous materials

## AIR RESOURCES MAPS AND ANALYSIS

Contra Costa County contains a multitude of air pollutant sources. Inventories of these sources have been prepared by the Bay Area Air Quality Management District, classifying sources as to type and strength. Table 8-5 lists an emissions inventory for Contra Costa County for five specific pollutants, known as "criteria" pollutants. Ambient air quality standards, set by both the federal and State government, exist for the "criteria" pollutants. Table 8-5 shows that automobiles are the largest source of each pollutant except for sulfur dioxide, which is primarily generated by petroleum refining and from power plants.

The concentrations of pollutants in the atmosphere are dependant not only on the amount of pollutant emitted, but on the ability of the atmosphere to transport and dilute the pollutant. Some pollutants, such as ozone, are not directly emitted to the atmosphere by any sources, but are the result of chemical reactions in the atmosphere between other pollutants. The chemical reaction that creates ozone in an urban atmosphere occurs between reactive organic gases (ROG) and oxides of nitrogen ( $\text{NO}_x$ ) in the presence of sunshine. The rate of reaction is very dependent on sunlight and temperature, so ozone concentrations will depend on the strength of sunlight and the temperature as well as transport and dilution by the wind.

Figure 8-6 shows the frequency of wind direction and average wind speed by direction for four locations within or near Contra Costa County. Together with the pattern of pollutant emissions, the ventilation characteristics of the County determine the pattern of air quality within it.

The Bay Area Air Quality Management District operates a total of seven air monitoring sites within the County. Some of the monitoring sites measure multiple pollutants, some measure only a single pollutant. Shown in Figure 8-6 is a summary of air quality data for four locations in the County for the pollutants ozone and carbon monoxide. Data on particulate matter concentrations are shown for the two locations where that pollutant is monitored. Concentrations of other pollutants such as sulfur dioxide, nitrogen dioxide, lead and hydrogen sulfide are also monitored regularly, but no violations of any State or federal standards have been recorded for these pollutants.

The western portions of the County show a very strong influence of winds through the Golden Gate. The prevailing wind directions at Berkeley and San Pablo reflect the direction to the Golden Gate: west at Berkeley and southwest at San Pablo. Ventilation in this area is very good, winds are persistent and strong and calms are relatively infrequent. Although heavily urbanized, this portion of the County has very good air quality due to the good ventilation characteristics, cool temperatures and lack of upwind sources of pollutants.



The wind data for the inland Diablo-San Ramon Valley shows a strong influence of terrain on wind. Winds are channeled by terrain, and the area is very sheltered, with relatively low average wind speeds and a very high frequency of calm conditions. The potential for air pollution in this area is high because of reduced ventilation and warm temperatures which promote the formation of ozone. This area is also downwind from the highly urbanized areas of western Contra Costa and Alameda counties. As a result, ozone levels exceed the federal ambient air quality standard a few days each year. The standard for carbon monoxide is not exceeded, but the State particulate (PM10) standard is exceeded several days per year.

The northern portions of the County from the Carquinez Straits eastward along the Sacramento River have good ventilation characteristics. The area is exposed to winds both from the west and east, and terrain provides little protection from the wind. Average windspeeds as measured in Pittsburg are relatively high and calm conditions are quite infrequent. This area contains a large portion of the industrial sources of pollutants within the County, and is located downwind of both the greater Bay Area and the Diablo Valley. As a result ozone levels exceed both the State and federal standards.

The eastern portions of the County are generally well ventilated by winds flowing through the Carquinez Straits and Delta. Terrain does not restrict ventilation, but temperatures are quite warm, promoting the formation of ozone. This portion of the County is very lightly urbanized, but ozone levels at Bethel Island indicate that violations of the State ozone standard occur. This is primarily due to the area's location downwind of the greater Bay Area.

#### AIR RESOURCES GOALS

- 8-AA. To meet Federal Air Quality Standards for all air pollutants.
- 8-AB. To continue to support federal, State and regional efforts to reduce air pollution in order to protect human and environmental health.
- 8-AC. To restore air quality in the area to a more healthful level.
- 8-AD. To reduce the percentage of Average Daily Traffic (ADT) trips occurring at peak hours.

TABLE 8-5  
INVENTORY OF AIR POLLUTANT EMISSIONS  
FOR CONTRA COSTA COUNTY

| <u>Source</u>                             | <u>Emissions In Tons/Day</u> |            |                       |                       |           |
|---|------------------------------|------------|-----------------------|-----------------------|-----------|
|   | <u>Part</u>                  | <u>ROG</u> | <u>NO<sub>x</sub></u> | <u>SO<sub>2</sub></u> | <u>CO</u> |
| <u>Petroleum Refining</u>                 |                              |            |                       |                       |           |
| Petroleum refining                        | 1.4                          | 0.1        | 6.3                   | 18.5                  | 0.1       |
| Other refining processes                  | 0.2                          | 3.8        | 0.0                   | 5.5                   | 0.3       |
| Combustion of fuels                       | 1.9                          | 0.8        | 30.6                  | 13.9                  | 3.3       |
| Loading, storage and blending             | 0.0                          | 7.9        | 0.0                   | 0.0                   | 0.0       |
| Process leaks (fugitive)                  | 0.0                          | 16.2       | 0.0                   | 0.0                   | 0.0       |
| <u>Chemical, Ind/Commercial Processes</u> |                              |            |                       |                       |           |
| Sulfur and sulfuric acid                  | 0.1                          | 0.1        | 0.0                   | 3.7                   | 1.6       |
| Other chemical processes                  | 1.1                          | 0.5        | 1.0                   | 0.1                   | 31.3      |
| Metallurgical and mineral                 | 5.5                          | 0.0        | 0.0                   | 0.2                   | 0.6       |
| Construction and demolition               | 15.5                         | 0.0        | 0.0                   | 0.0                   | 0.0       |
| Gas distribution                          | 0.0                          | 6.4        | 0.0                   | 0.0                   | 0.0       |
| Other industrial/commercial               | 5.3                          | 3.3        | 2.3                   | 3.2                   | 0.0       |
| <u>Organic Compounds Evaporation</u>      |                              |            |                       |                       |           |
| Gasoline bulk plants                      | 0.0                          | 1.7        | 0.0                   | 0.0                   | 0.0       |
| Gasoline filling stations                 | 0.0                          | 0.9        | 0.0                   | 0.0                   | 0.0       |
| Architectural coating                     | 0.0                          | 5.4        | 0.0                   | 0.0                   | 0.0       |
| Other surface coating                     | 0.0                          | 5.2        | 0.0                   | 0.0                   | 0.0       |
| Solvent degreasing                        | 0.0                          | 0.6        | 0.0                   | 0.0                   | 0.0       |
| Dry cleaners                              | 0.0                          | 0.8        | 0.0                   | 0.0                   | 0.0       |
| Printing                                  | 0.0                          | 0.8        | 0.0                   | 0.0                   | 0.0       |
| Other organics evaporation                | 0.0                          | 3.5        | 0.0                   | 0.0                   | 0.0       |
| <u>Combustion</u>                         |                              |            |                       |                       |           |
| Domestic                                  | 3.4                          | 1.3        | 2.9                   | 0.1                   | 16.6      |
| Utilities - power plants                  | 0.7                          | 0.1        | 24.0                  | 2.5                   | 4.8       |
| Cogeneration                              | 0.2                          | 0.2        | 6.9                   | 0.2                   | 1.9       |
| Reciprocating engines                     | 0.5                          | 1.3        | 3.4                   | 0.1                   | 13.4      |
| Other fuels combustion                    | 0.2                          | 0.1        | 5.6                   | 0.9                   | 0.8       |
| Waste burning and incineration            | 0.2                          | 0.1        | 0.3                   | 0.0                   | 0.4       |
| <u>Off-Highway Mobile Sources</u>         |                              |            |                       |                       |           |
| Farm and construction equipment           | 0.1                          | 0.4        | 2.0                   | 0.2                   | 2.8       |
| Ships, boats and locomotives              | 0.2                          | 0.5        | 1.6                   | 1.8                   | 0.5       |
| Pleasure boats                            | 0.0                          | 2.9        | 0.8                   | 0.1                   | 14.2      |

TABLE 8-5 (CONTINUED)

| <u>Source</u>                         | <u>Emissions In Tons/Day</u> |            |                       |                       |            |
|---------------------------------------|------------------------------|------------|-----------------------|-----------------------|------------|
|                                       | <u>Part</u>                  | <u>ROG</u> | <u>NO<sub>x</sub></u> | <u>SO<sub>2</sub></u> | <u>CO</u>  |
| <u>Aircraft</u>                       |                              |            |                       |                       |            |
| Commercial aircraft                   | 0.0                          | 0.0        | 0.0                   | 0.0                   | 0.0        |
| Military                              | 0.0                          | 0.0        | 0.0                   | 0.0                   | 0.0        |
| Other                                 | 0.0                          | 0.2        | 0.1                   | 0.0                   | 4.1        |
| <u>Motor Vehicles</u>                 |                              |            |                       |                       |            |
| Cars and light duty trucks            | 2.62                         | 9.9        | 19.6                  | 0.6                   | 210.0      |
| Medium and heavy duty gas. trucks     | 0.9                          | 9.9        | 8.0                   | 0.3                   | 92.3       |
| Diesel trucks and buses               | 1.4                          | 1.5        | 8.7                   | 1.4                   | 3.8        |
| Motorcycles                           | 0.0                          | 0.7        | 0.1                   | 0.0                   | 2.0        |
| <u>Miscellaneous Emission Sources</u> |                              |            |                       |                       |            |
| Unplanned fires                       | 0.1                          | 0.1        | 0.0                   | 0.0                   | 0.9        |
| Entrained road dust                   | 53.2                         | 0.0        | 0.0                   | 0.0                   | 0.0        |
| Bio degeneration                      | 0.0                          | 1.3        | 0.0                   | 0.0                   | 0.0        |
| Consumer solvent usage                | 0.0                          | 6.0        | 0.0                   | 0.0                   | 0.0        |
| Pesticides usage                      | <u>0.0</u>                   | <u>0.6</u> | <u>0.0</u>            | <u>0.0</u>            | <u>0.0</u> |
| Grand Total                           | 94.6                         | 114.5      | 124.2                 | 53.3                  | 405.7      |

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PART = Particulates

ROG = Reactive Organic Gases (Hydrocarbons)

NO<sub>x</sub> = Oxides of Nitrogen

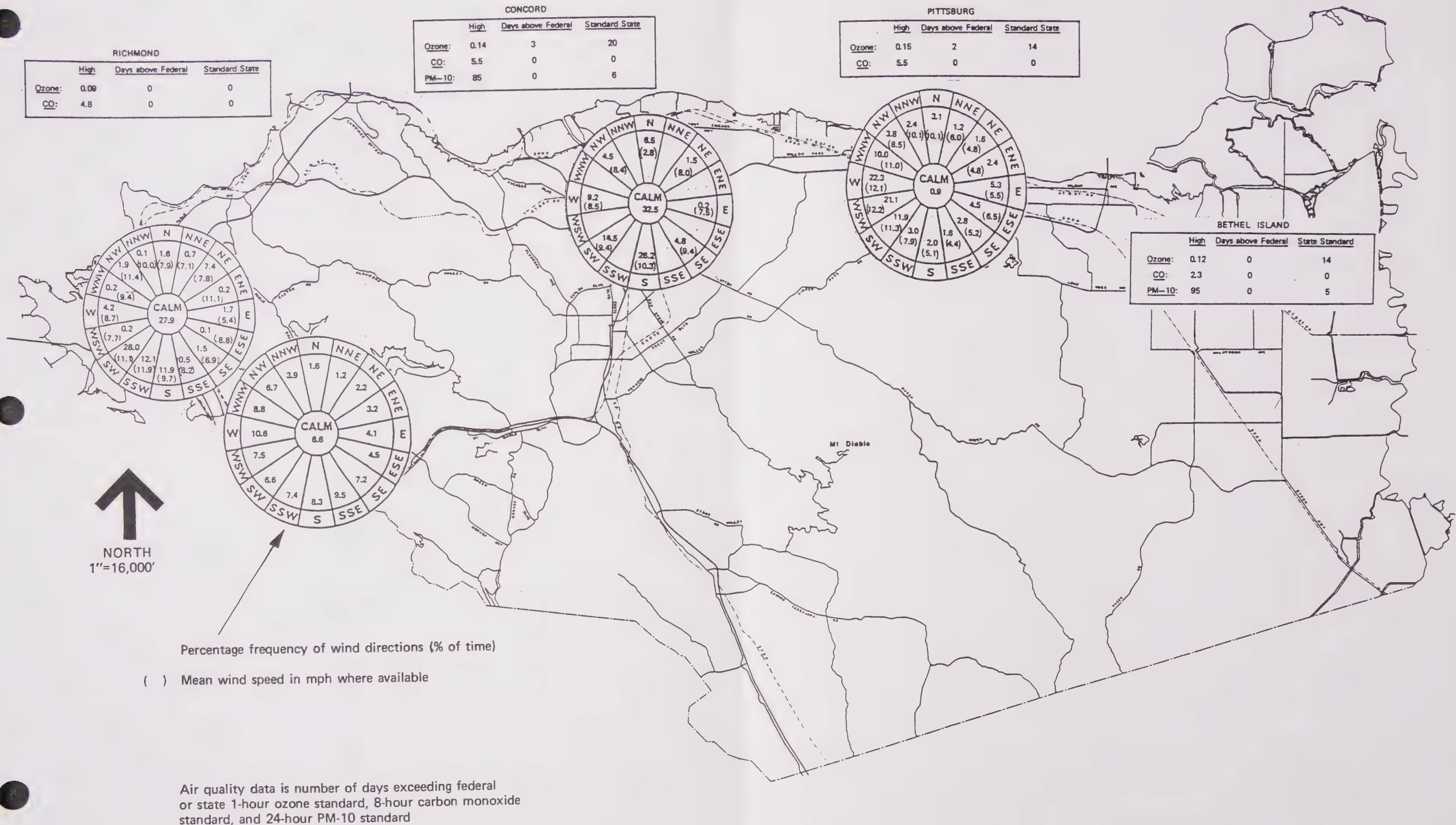
SO<sub>2</sub> = Sulfur Dioxide

CO = Carbon Monoxide

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Figure 8-6 Air Quality





## AIR RESOURCES POLICIES

- 8-98. Development and roadway improvements shall be phased to avoid congestion.
- 8-99. The free flow of vehicular traffic shall be facilitated on major arterials.
- 8-100. Vehicular emissions shall be reduced throughout the County.
- 8-101. A safe, convenient and effective bicycle and trail system shall be created and maintained to encourage increased bicycle use and walking as alternatives to driving.
- 8-102. A safe and convenient pedestrian system shall be created and maintained in order to encourage walking as an alternative to driving.
- 8-103. When there is a finding that a proposed project might significantly affect air quality, appropriate mitigation measures shall be imposed.
- 8-104. Proposed projects shall be reviewed for their potential to generate hazardous air pollutants.
- 8-105. Land uses which are sensitive to air pollution shall be separated from sources of air pollution.
- 8-106. Air quality planning efforts shall be coordinated with other local, regional and State agencies.
- 8-107. New housing in infill and peripheral areas which are adjacent to existing residential development shall be encouraged.

## AIR RESOURCES IMPLEMENTATION MEASURES

### Development Review Process

- 8-dm. Review major development applications for consistency with regional air quality plan assumptions.
- 8-dn. Review major development applications to ensure that buffer zones are provided between major air pollution sources (freeways, industry, etc.) or sources of hazardous pollutants and sensitive receptors such as hospitals, convalescent homes and residences.
- 8-do. Consistent with the uses and ranges of density specified in this plan, particularly those in the Land Use Element and the Growth Management Element, encourage development that would reduce long distance commuting, positively affect the desired jobs/housing balance or promote alternative forms of transportation.
- 8-dp. In addition to improving the jobs/housing balance, an effort to fill jobs in the County with County residents through "local hire" policies could be encouraged. Job training programs for County residents should be tailored to local jobs.
- 8-dq. Review proposed development to encourage maximum use of bicycle, pedestrian and transit modes of transportation.



Intergovernmental Coordination

- 8-dr. Support efforts at the State and regional level to enact legislation providing for stricter controls on mobile, stationary and area sources of air pollutants.
- 8-ds. Cooperate with the Association of Bay Area Governments (ABAG), Bay Area Air Quality Management District (BAAQMD), and Metropolitan Transportation Commission (MTC) in future regional air quality planning efforts.

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1. Larry Soenen, District Conservationist, U.S. Department of Agriculture, Soil Conservation Service. Telephone communication, October 9, 1990.

2. The U.S. Soil Conservation Service classifies soils on a scale from I to VIII based on agricultural suitability and limitations for cultivation. The factors considered in determining soils classes include degree of slope, depth to bedrock, water holding capacity, natural drainage and tendency to flood, risk of erosion, and soil chemistry. Class I and Class II soils are considered prime soils for agriculture. In addition, certain Class III soils, though not technically "prime", are very good for certain types of crops. See U.S. Soil Conservation Service, Soil Survey of Contra Costa County, (1977).

3. U.S. Soil Conservation Service, Soil Survey of Contra Costa County, 1977, page 20, 28-29, and 43-44.

The rangelands of Contra Costa and the other counties in the San Francisco Bay region (mostly Class IV and VI) are considered to be some of the finest grazing lands in the nation. Because of the fog, livestock can be grazed on the land for a longer portion of the year eliminating much of the need for imported fodder. In the Central Valley and the foothills of the Sierra, it may take twenty acres of range to support one cow and her calf; in the East Bay hills, as little as six acres, according to People for Open Space, Endangered Harvest, 1980, pages 14-15.







## **9. OPEN SPACE ELEMENT**

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## 9. OPEN SPACE ELEMENT

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### 9.1 INTRODUCTION

Contra Costa County is bestowed with a wide variety of natural and cultural resources which are currently held publicly or privately as open space. Natural open space areas include woods, mountains, lakes, streams, wetlands, and agricultural land. Scenic resources, parks and recreation land are also considered open space lands. Furthermore, the County has important historic and archaeologic sites which qualify as resources and which should be preserved.

The Open Space Element of the General Plan has three major components: (1) a policy framework for the preservation of open space lands, (2) an open space map identifying County lands subject to the policies contained herein, and (3) an implementation program.

Natural resources, including Agricultural Resources, are discussed under the Conservation Element of the County's General Plan (Chapter 8). The Open Space Element analyzes open space classified as Scenic Resources, Outdoor Recreation, and Historic/Cultural Resources.

As in the case with the preservation of natural resources and agricultural resources, the Open Space Element is significantly affected by policies reflected in Measure C -1990. These policies, found throughout this General Plan, include the 65/35 Preservation Standard, the Urban Limit Line, hillside protection policies, preservation agreements and the policy to advise LAFCO to respect and support the County's 65/35 Preservation Standard, ULL, and growth management standard when considering requests for incorporation or annexation to cities or service districts.

The ULL works together with the 65/35 Preservation Standard to protect open space. Criteria for considering the location of the ULL includes open space, parks and other recreation areas, lands with slopes with a grade of 26 percent or greater, wetlands and certain other areas not appropriate for urban growth. Even if land is developed within the ULL, a substantial portion is to be retained for open space, parks and recreational uses.



## LEGAL AUTHORITY

This chapter of the Contra Costa County General Plan encompasses many diverse issues dealing with the preservation and management of open space areas in the County. The chapter covers the issues required by the State General Plan laws to be addressed.

The legal requirements for the Open Space Element are included in Section 65560 et. seq. and 65302 (e) of the California Government Code. The Open Space Element is a plan for the comprehensive and long-range preservation and conservation of "open space land." "Open space land" is defined in the statutes as any area of land or water which is essentially unimproved and devoted to an open space use and which is designated on a local, regional or State open space plan as open space for the preservation of natural resources, the managed production of resources, outdoor recreation, or for public health and safety.

In adopting the requirement that all jurisdictions must prepare an Open Space Element, the Legislature found that the preservation of open space land is necessary not only for the maintenance of the economy of the State, but also for the continued availability of land for the production of food and fiber, for the enjoyment of scenic beauty, for recreation, and for the use of natural resources. The legislature further found that discouraging premature and unnecessary conversion of open space land to urban uses is in the public interest because it discourages non-contiguous development patterns which tend to increase the costs of community services to community residents. Finally, the legislature found that the anticipated increase in the population of the State demands that cities, counties, and the State make plans at the earliest possible date for the preservation of valuable open space land and take positive action to carry out such plans by the adoption and strict administration of laws, ordinances, rules and regulations.

Government Code Section 65564 requires that every local open space plan contain an action program consisting of the specific programs which the legislative body intends to pursue in implementing its open space plan. That action program is described in the implementation measures contained in this chapter and in the conservation element and in the CEQA mitigation monitoring program adopted concurrently with this General Plan.

## 9.2 RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

The Open Space Element is related to other elements of the General Plan and has equal legal status with all other sections of the Plan.

The Open Space Element is closely related to the Conservation Element of the General Plan and is coordinated with that element. Primary impacts of the Open Space Element are expected on land use policies, and in view of the interplay with the ULL and 65/35 Preservation Standard the element is coordinated with the Land Use Element. In addition, the Open Space Element is related to the Public Facilities/Services Element and in that open space areas are designated based partly on seismic and landslide risk.

With reference to the Land Use Element Map, the following map designations and their respective map symbols are considered to be open space designations within the definition contained in the State statute:

- o Open Space (OS)
- o Parks and Recreation (PR)
- o Agricultural Lands (AL)
- o Agricultural Core (AC)
- o Delta Recreation (DR)
- o Watershed (WS)
- o Water (WA)

Lands outside the Urban Limit Line may be designated for landfills with the LF designation. LF is not an open space designation pursuant to the state open space planning statute, Government Code Sections 65560-65570, although LF lands may be surrounded by open space lands. Landfills are public purpose facilities, which are defined as non-urban uses in the Board of Supervisors' 65/35 Land Preservation Plan, adopted by the County's voters as Measure C in November 1990. Facilities for public purposes are allowed outside the Urban Limit Line. The LF designation is consistent with, and implements, this provision of the 65/35 plan. The LF designations in this plan also implement the voters' decisions in approving Measure C in June 1990 (the Keller Canyon referendum).

### **9.3 RELATIONSHIP TO OTHER GENERAL PLAN DOCUMENTS**

The goals, policies and implementation measures contained in this element are intended to guide planning for public and private projects that are subject either to approval of the County planning agency, or to review by County staff, although they may be under the jurisdiction of other public agencies operating in the County. Such goals, policies and implementation measures are intended to accord with the other elements of the General Plan, and have equal legal status with all other sections of the Plan.

## 9.4 OPEN SPACE ELEMENT ORGANIZATION

This chapter of the General Plan is divided into three sections that present background information, policies, maps, and implementation measures regarding:

- o scenic resources, including scenic ridges, hillsides and rock outcroppings; and, the San Francisco Bay/Delta estuary system;
- o historic and cultural resources; and
- o parks and recreation, including local parks, trails and paths, and private recreational facilities.

## 9.5 OVERALL GOALS AND POLICIES

The following goals and policies are overall statements regarding the need to preserve and efficiently manage open space within the County. More detailed policies particular to each type of resource are discussed under separate topic sections in the Conservation Element of the General Plan.

### OVERALL OPEN SPACE GOALS

- 9-A. To preserve and protect the ecological, scenic and cultural/historic, and recreational resource lands of the County.
- 9-B. To conserve the open space and natural resources of the County through control of the direction, extent and timing of urban growth.
- 9-C. To achieve a balance of open space and urban areas to meet the social, environmental and economic needs of the County now and for the future.

### OVERALL OPEN SPACE POLICIES

- 9-1. Permanent open space shall be provided within the County for a variety of open space uses.
- 9-2. Historic and scenic features, watersheds, natural waterways, and areas important for the maintenance of natural vegetation and wildlife populations shall be preserved and enhanced.
- 9-3. Areas designated for open space shall not be considered as a reserve for urban land uses. In accordance with Measure C - 1990, at least 65 percent of all land in the County shall be preserved for agriculture, open space, wetlands, parks and non-urban uses.
- 9-4. Where feasible and desirable, major open space components shall be combined and linked to form a visual and physical system in the County.
- 9-5. The visual identities of urban communities shall be preserved through the maintenance of existing open space areas between cities and/or communities.



- 9-6. Open space acquisition shall be planned and funded, in concert with the region's staged transportation, landfill, and water and sewage plant and programs.
- 9-7. Open space shall be utilized for public safety, resource conservation and appropriate recreation activities for all segments of the community.
- 9-8. Development project environmental review will consider the effect of the project on the County's open space resources, whenever the project proposes to convert substantial amounts of land from an open space designation to an urban development designation.
- 9-9. The County shall preserve open space lands located outside the Urban Limit Line by declining to authorize requests for general plan amendment studies which would result in redesignation of such lands to urban land use designations. The County shall not designate any open space land located outside the ULL for an urban use. A substantial portion of land developed within the ULL shall be retained for open space, parks and recreational uses.

## 9.6 SCENIC RESOURCES

### INTRODUCTION

Contra Costa County is perceived by many as a desirable place to live and work. A major component in that perception is the scenic vistas which are available throughout the County. While there are many localized scenic features in the County, there are two main resources which are treated in this section: (1) scenic ridges, hillsides and rock outcroppings; and (2) the San Francisco Bay/Delta estuary system.

Throughout much of Contra Costa County, there are significant topographic variations in the landscape. The largest and most prominent of these hills form the backdrop for much of the developed portions of the area. Views of these major ridgelines help to reinforce the rural feeling of the County's rapidly growing communities. These major ridges provide an important balance to current and planned development.

Individual home sites or housing tracts are sometimes constructed on ridge tops in such a way that the scenic views from the site are superb, but the view of the ridge to all others, including other property owners, is adversely affected. This can occur if the proposed structures are poorly placed or if the accompanying landscaping is completely unrelated to the natural setting of the surrounding properties. In addition, other features of the development such as roads, power lines and storage tanks can degrade the scenic quality of an area if they are not carefully designed, located and landscaped.

Properties with scenic resources which are already designated for open space use should be protected through strict land regulations and, on occasion, through acquisition.

For scenic areas that are planned for some amount of development, the application review process shall consider the feasibility of preserving or protecting the scenic qualities of the site. The County planning agency shall be responsible for determining the extent and practicality of preserving such resources. The preparation of environmental impact reports can often help to analyze the significance of previously unidentified opportunities. Whenever it is determined to be feasible, scenic features should be protected and maintained, either through land dedication to a public agency or the granting of scenic easements.

On the other hand, there are man-made facilities, such as non-conforming signs and overhead utility lines, which are unattractive and should be eliminated or abated to enhance the scenic qualities of specific areas in the County.

The other major scenic resource of Contra Costa County is the extensive water and delta system of San Francisco, San Pablo, and Suisun Bays. The bays extend along the entire western and northern perimeter of the County. This waterway system provides a pleasant contrast to the land forms of the area. Where the water reaches the shoreline, a mix of land uses occur: salt marshes, railroad tracks, industrial activities, housing and parkland. All add to the diversity and interest of the shoreline.

Appropriate land uses for the shoreline areas are indicated on the Land Use Element map. All new uses along the shoreline should be reviewed for their impact on the visual and scenic aspects of the bay. Efforts should be made to require quality design. The Scenic Waterways designation on the Scenic Resources map below applies to the waterway and its shoreline; the intent of the designation is to draw attention to its scenic character for consideration when reviewing projects.

#### SCENIC RESOURCE AREA MAP

Figure 9-1 identifies the major scenic resources in the County, including major ridges and scenic waterways, which should be considered when evaluating nearby development proposals.

The County has many smaller, localized scenic resources such as isolated hilltops, rock outcroppings, mature stands of trees, lakes, reservoirs and other natural features. These smaller resource areas are not identified on the map, but they should be reviewed on a case-by-case basis to determine their visual quality. All of these scenic resources should be treated as aesthetic opportunities which should be incorporated into the design of any new development.

## SCENIC RESOURCES GOALS

- 9-D. To preserve and protect areas of identified high scenic value, where practical, and in accordance with the Land Use Element map.
- 9-E. To protect major scenic ridges, to the extent practical, from structures, roadways, or other activities which would harm their scenic qualities.
- 9-F. To preserve the scenic qualities of the San Francisco Bay/Delta estuary system and the Sacramento-San Joaquin River/Delta shoreline.

## SCENIC RESOURCES POLICIES

- 9-10. In areas designated for urban development, the principles outlined below shall be applied in the review of development proposals.
- 9-11. High quality engineering of slopes shall be required to avoid soil erosion, downstream flooding, slope failure, loss of vegetative cover, high maintenance costs, property damages, and damages to visual quality. Particularly vulnerable areas should be avoided for urban development. Slopes of 26 percent or more shall be protected and are generally not desirable for conventional cut-and-fill pad development. Development on open hillsides and significant ridgelines shall be restricted.
- 9-12. In order to conserve the scenic beauty of the County, developers shall generally be required to restore the natural contours and vegetation of the land after grading and other land disturbances. Public and private projects shall be designed to minimize damages to significant trees and other visual landmarks.
- 9-13. Providing public facilities for outdoor recreation should remain an important land use objective in the County, as a method of promoting high scenic quality, for air quality maintenance, and to enhance outdoor recreation opportunities of all residents.
- 9-14. Extreme topographic modification, such as filling in canyons or removing hilltops, shall be avoided. Clustering and planned unit development approaches to development shall be encouraged. All future development plans, whether large or small scale, shall be based on identifying safe and suitable sites for buildings, roads and driveways. Exemptions to this policy are appropriate for mining, landfill, and public projects in open space areas.
- 9-15. In areas along major scenic ridges which are designated for open space use, the principles outlined in Policy 9-19 through Policy 9-26 shall apply.
- 9-16. New water tanks that would harm the visual quality of a scenic ridge shall be buried, camouflaged or screened to mitigate their impacts.
- 9-17. New power lines shall be located parallel to existing lines in order to minimize their visual impact.
- 9-18. The construction of new structures on the top of major scenic ridges or within 50 feet of the ridgeline shall be discouraged.
- 9-19. When development is permitted to occur on hillsides, structures shall be located in a manner which is sensitive to available natural resources and constraints.

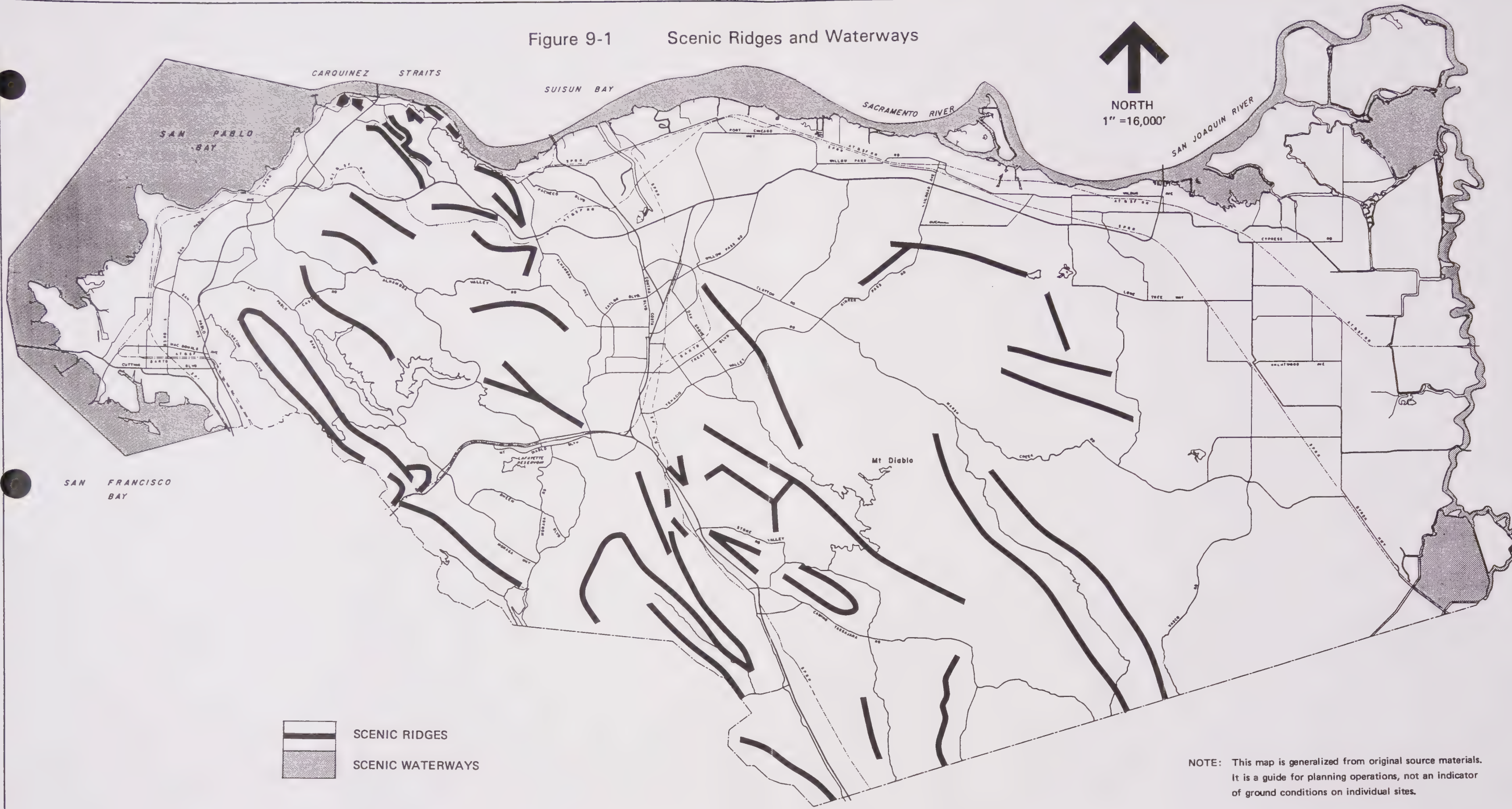


- 9-20. Hilltops, ridges, rock outcroppings, mature stands of trees, and other natural features shall be considered for preservation, at the time that any development applications are reviewed.
- 9-21. Any new development shall be encouraged to generally conform with natural contours to avoid excessive grading.
- 9-22. All new land uses which are to be located below a major scenic ridge shall be reviewed with an emphasis on protecting the visual qualities of the ridge.
- 9-23. The involvement of public interest groups shall be encouraged when identifying, acquiring, and maintaining those areas of unique visual quality in the County.
- 9-24. The appearance of the County shall be improved by eliminating negative features such as non-conforming signs and overhead utility lines, and by encouraging aesthetically designed facilities with adequate setbacks and landscaping.
- 9-25. Maintenance of the scenic waterways of the County shall be ensured through public protection of the marshes and riparian vegetation along the shorelines and delta levees, as otherwise specified in this plan.
- 9-26. Tule islands and levee remnants within the County shall be restricted from new development.
- 9-27. Physical and visual public access to established scenic routes shall be protected.

#### SCENIC RESOURCE IMPLEMENTATION MEASURES

- 9-a. Prepare specific plans and/or adopt an ordinance which would delineate the boundaries of and protect the major scenic ridgelines not already under public ownership.
- 9-b. Carefully study and review any development projects which would have the potential to degrade the scenic qualities of major significant ridges in the County or the bay and delta shoreline.
- 9-c. Develop hillside and ridgeline design guidelines to provide better guidance for development, particularly as it relates to grading, massing and relationship of structures to ridgelines.
- 9-d. Where possible, structures shall not be built on the top of any designated scenic ridgeline.
- 9-e. Develop and enforce guidelines for development along scenic waterways to maintain the visual quality of these areas.
- 9-f. Prepare a corridor study in which an appropriate scenic corridor width will be defined along all proposed scenic routes.
- 9-g. Prepare a visual analysis of proposed scenic routes to identify views of significant visual or cultural value.
- 9-h. Identify and designate "gateways" within the scenic routes which are located at unique transition points in topography or land use and serve as entrances to regions of the County.

Figure 9-1 Scenic Ridges and Waterways



NOTE: This map is generalized from original source materials. It is a guide for planning operations, not an indicator of ground conditions on individual sites.

**CONTRA COSTA COUNTY  
CALIFORNIA**





## 9.7 HISTORIC AND CULTURAL RESOURCES

### INTRODUCTION

Northern California has been occupied for at least the last 10,000 years. The early inhabitants have been identified as the Paleo Indians who were nomadic, using primarily large pointed tools for hunting and collecting seafood. It is assumed that the Bay Area was inhabited from 5,000 to 10,000 BP (before present); however, no sites have been identified.

With the sea level stabilizing, the Bay and Delta were substantially formed. The subsistence pattern of the early inhabitants shifted with emphasis placed on acorn processing and hunting. Trade increased and tools and ornaments were more abundant as well as refined. Between 2,000 and 5,000 BP, cultural patterns were established in large villages along the shoreline and inland permanent streams throughout the Bay Area. The population grew rapidly and a complex society developed.

The beginning of the cultures that were in place at contact with the Spanish was approximately 1,500 B.P. This period saw the continuation of the growth of economic specialization and the introduction of the bow and arrow. The three groups that inhabited Contra Costa County, the Coastanoan (Ohlone), Bay Miwok and the Northern Valley Yokuts, established their territorial boundaries. Prehistoric evidence indicates that perhaps the Yokuts were the last to arrive in the Bay Area.

The Coastanoans inhabited the western hills, plains and the Bayshore from Carquinez south to Salinas. All of the village sites were associated with a permanent source of fresh water. Many were at the mouth of streams along the Bayshore, but a number of villages were established inland along permanent streams at the base of the hills at the 50 to 150 meter elevation, as evidenced by the many sites which have been identified. Special use and seasonal use sites were established throughout the Coastanoan territory, often in association with rock outcrops or abundant food sources.

The Bay Miwok settled along the western slopes of the Diablo range, the inland valleys and on the northern coastal plains. Their largest villages were located in the San Ramon Valley. The Northern Valley Yokuts settled along the eastern slopes of the Diablo range to the San Joaquin River. Their primary villages were along the San Joaquin River with only scattered use of the eastern plains and smaller secondary villages in the inland valleys. In 1776 Mission Dolores was established in San Francisco. Cultural subjugation, plagues and the subdivision of the area into ranches largely destroyed Native American lifestyles.

Historical sites and landmarks are unique reminders of the social, economic and political history of Contra Costa County and may serve as sources of private investment and places of public recreational and educational activities. There are many local historical societies and organizations within the County which have been organized to preserve sites, structures and natural features which exemplify aspects of the history of a particular area of the County as a whole. These groups play an active role in increasing the level of appreciation and awareness of the County's many historical resources.

Many historical structures in the County are also listed on the National Register of Historic Places, as well as with the State of California Office of Historic Preservation. Many communities have also established architectural standards or forms of regulation or controls, such as zoning, which require preservation of historical structures and landmarks during the development process.

## MAP OF HISTORIC AND CULTURAL RESOURCE AREAS

### Archaeological Resources

A systematic archaeological survey has not been conducted for Contra Costa County. There are, however, approximately 600 archaeological sites within the County which have been recorded with the Archaeological Inventory, Northwest Information Center at Sonoma State University. Identification of these archaeological sites is largely the result of sporadic surveys conducted in association with development proposals. Large areas of the County that have been retained in agriculture have never been surveyed and may yield prehistoric settlement patterns.

An archaeological sensitivity map has been prepared (see Figure 9-2). This map conceptually illustrates areas of varying archaeological sensitivity within the County and is intended to be used as a planning tool for determining future survey requirements imposed upon development applications.

The sensitivity map has been divided into five categories: (1) extremely sensitive (known sites); (2) highly sensitive (high probability for potential sites); (3) medium sensitivity (possible sites); (4) moderately sensitive (higher probability of subsurface resources, due to deposition); and (5) low sensitivity (mainly the ridgetops). These categories and the reasons for designation are described below.

As indicated previously, over 600 sites have been identified in Contra Costa County and wherever these sites have been located, an extremely sensitive designation has been applied. Areas nearwater are considered most likely to contain an archaeological site(s) and have been designated as highly sensitive. This designation

includes stream courses because the native groups would have established settlements or seasonal sites along permanent and seasonal streams. Thus the streams provide potential prehistoric and historic resources.

Accessible areas near water were designated to have medium sensitivity. This includes the plains areas between two stream corridors. These areas were used for hunting, butchering camps, hunting blinds or food processing sites. The next level of sensitivity, identified as moderately sensitive, generally encompasses the plains and Delta area. This category is divided into two areas: an area showing surface manifestation of use and an area where indications of prehistoric use would most likely be buried. Because of the deposition that has occurred in this part of the County, subsurface monitoring should be conducted as a condition of project approval.

The areas designated as low sensitivity may contain special use sites and would not require as intense an archaeological reconnaissance as required with the above categories. However, as a condition of project approval for projects proposed in this designated area, a reconnaissance should be conducted. This would entail an archaeologist to scan a site for outcrops, caves, quarries, etc., which may have the potential to yield further information.

Substantial areas within Southeast County have been identified by various governmental agencies and knowledgeable individuals as containing both unique biological habitats, scenic values, and significant archeological resources. Specifically, on privately owned land east of Vasco Road caves have been created by the wind in sandstone cliffs overlooking the San Joaquin Valley. These caves were used by some of the County's earliest inhabitants, and valuable Native American artifacts have been discovered. In particular, well-preserved petroglyphs (Indian paintings) have been discovered in the caves, as well as numerous middens in the adjacent area.

Both public and private stewardship of the resources on-site shall be considered as long as the protection is long term and guaranteed in some manner. The acquisition of lands in these areas by the County for the East Contra Costa Airport, and acquisition of watershed lands by the Contra Costa Water District, may aid in the permanent protection of some of these archeological resources.

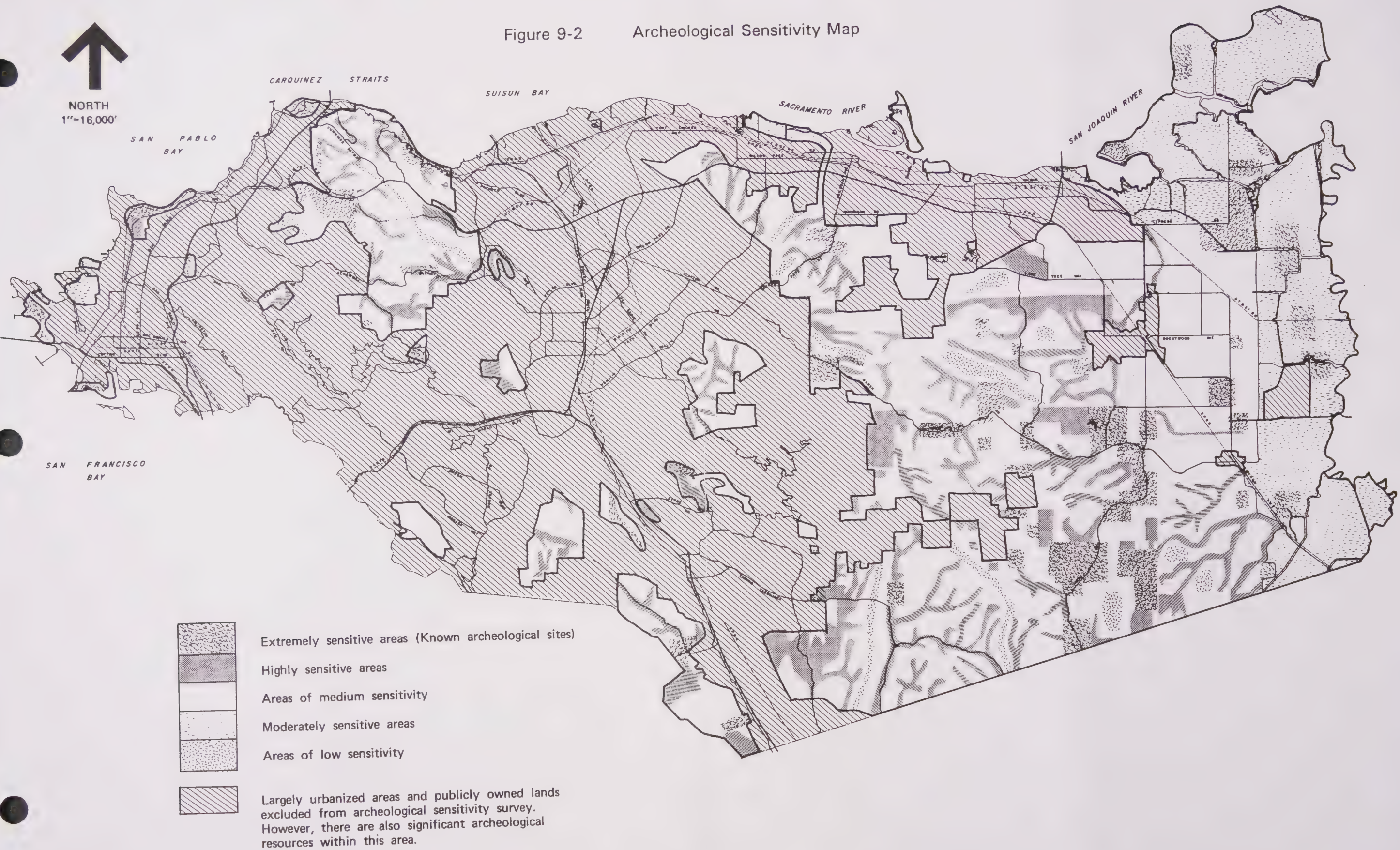
Due to the fragile nature of some of these resources, public access to the areas should be limited or restricted in some cases. To facilitate a better understanding of the unique archeological and natural resources in the







Figure 9-2 Archeological Sensitivity Map









by the Federal and State governments, along with an extensive system operated by the East Bay Regional Park District. Additionally, there are some municipal facilities which are major parks. For the purpose of this portion of the Plan, the following definitions shall apply:

**Major Parks** are intended to provide a broad range of recreational opportunities, which may include hiking, bicycling, equestrian use, fishing, swimming, camping or group sports, etc. Preservation of historical structures also is included within this grouping.

**Major Open Space Areas** are lands within public ownership of significant undeveloped areas. The major purpose of these areas is to protect the uniqueness of these lands through passive recreational activities that do not require substantial facilities or improvements. Agriculture is an appropriate secondary use.

The existing and proposed Major Parks and Major Open Space Areas are shown on Figure 9-3. While major parks usually cover areas over 100 acres, shoreline and marsh areas may be much smaller, reflecting the unique areas they protect. With recent voter approval of State and regional park bonds, this plan anticipates the expansion of existing major park and open space facilities.

The two primary agencies administering major parks in the County are the State Department of Parks and Recreation and the East Bay Regional Park District. The State Department of Parks and Recreation operates two parks, Mt. Diablo State Park and Franks Tract State Recreation Area. These parks are intended to serve the population of the State as a whole, not just residents of Contra Costa County.

The East Bay Regional Park District encompasses all of Contra Costa County and most of Alameda County. The district currently maintains 26 parks within or potentially within the County, performing the function of providing major park facilities which is normally undertaken by county government. They maintain parks in differing types which are classified as Regional Parks, Regional Preserves, Regional Recreation areas, Regional Shorelines, Regional Wilderness Areas and Regional Open Spaces. These facilities are included within the major parks definition, except for the Regional Open Spaces, Regional Preserves, and Regional Wilderness Areas, which are included within the Major Open Space Area definition.

There are other agencies which operate major park facilities within the County. The U.S. National Park Service operates the John Muir National Historic Site in Martinez and the Tao House in Danville. The East Bay Municipal Utilities District owns substantial acreage of open space lands, some of which has a secondary recreation function, e.g., Lafayette and San Pablo Reservoirs. Additionally, the cities of Pittsburg, Walnut Creek and Concord operate facilities which serve a major park function.

While no county standard is included for Major Parks or Open Space areas, there are numerous areas within the County which deserve to be placed in new parks or added to existing ones. This plan endorses the expansion of Major Park and Open Space Areas to protect the unique resources of the County.

New opportunities for parks arise when additional lands are acquired for other purposes, such as the proposed Los Vaqueros Reservoir in Southeast County. It is anticipated that if one or more reservoirs are constructed within that area, there will be recreational facilities associated with the water project. A park symbol is shown on the Parks and Recreation map to recognize potential parks and recreation uses within the Los Vaqueros watershed area.

There are other locations within the Southeast County area which have potential for development of major new recreational facilities; however, plans for their acquisition are just now being realized. At the time that the East Bay Regional Park District or another public agency is prepared to consider seriously the establishment of such facilities, these proposed facilities should be reviewed by the County to ensure compatibility with the concepts found in this plan and with adjacent existing land uses. Among the sites with such potential are Round Valley, the Byron Hot Springs, and the Vasco Caves area.

**Local Parks.** Local parks are areas of open space set aside for recreational use and are located within an acceptable distance from the people they serve. They serve as the focal points for neighborhoods and communities where people can meet and enjoy their leisure time together. Local parks provide a visual counterpoint to the often intense developed areas in which they are located. The more intense the development, the greater the need for adequate parks.

This plan for local parks specifies the County's standards and general locations of existing and proposed facilities. While the map of local park facilities (Figure 9-4) shows a county-wide distribution, it has an enforceable effect for the unincorporated area only. Where differences exist between this plan and those of a city, the city plans will take precedence within incorporated areas.

area, a detailed inventory should be prepared. Efforts to secure financing for such an effort should be explored upon adoption of this plan.

### Historic Resources

An historic resources inventory was compiled in 1976 by the County in coordination with the local historical societies. While the historic resources inventory is not considered to be a comprehensive listing of the County's historic resources, it is a major starting point for the protection of historic resources.

## HISTORIC AND CULTURAL RESOURCE GOALS

9-G. To identify and preserve important archaeologic and historic resources within the County.

## HISTORIC AND CULTURAL RESOURCE POLICIES

- 9-28. Areas which have identifiable and important archaeologic or historic significance shall be preserved for such uses, preferably in public ownership.
- 9-29. Buildings or structures that have visual merit and historic value shall be protected.
- 9-30. Development surrounding areas of historic significance shall have compatible and high quality design in order to protect and enhance the historic quality of the area.
- 9-31. Within the Southeast County area, applicants for subdivision or for land use permits to allow non-residential uses shall provide information to the County on the nature and extent of the archeological resources that exist in the area. The County Planning Agency shall be responsible for determining the balance between the multiple use of the land with the protection of resources.

## HISTORIC AND CULTURAL RESOURCE IMPLEMENTATION MEASURES

### Development Review Process

- 9-i. Develop an archaeological sensitivity map to be used by staff in the environmental review process for discretionary permits to determine potential impacts upon cultural resources.
- 9-j. As a condition of approval of discretionary permits, include a procedure to be followed in the event that archaeological resources are encountered during development or construction.

### Ordinance Revisions

- 9-k. Review existing County ordinances and guidelines and make amendments as necessary to ensure that they provide adequate safeguards for archaeologic and historic resources.



- 9-1. Develop design guidelines for areas adjacent to or within scenic corridors or historic sites.

#### Other Programs

- 9-m. Promote the use of the State of California Historic Building Code to protect historic sites in the County.
- 9-n. Encourage owners of eligible historic properties to apply for State and Federal registration of these sites and to participate in tax incentive programs for historic restoration.
- 9-o. Seek coordination and cooperation with Federal, State, and local governments, and with private and non-profit organizations, to establish funding sources to preserve, restore, and enhance unique historic sites. Such funding sources may be used to acquire and preserve sites or to acquire easements over sites and building facades.
- 9-p. Identify funding mechanisms, including funding from the County to the extent possible, to support programs to preserve, restore, and enhance unique historic sites.

### **9.8 PARK AND RECREATION FACILITIES**

#### **INTRODUCTION**

A recreation component of the General Plan is required to plan for the recreational lands and facilities necessary to meet the needs and desires of the community, while coordinating these plans with the other elements. State law requires that a recreation component be adopted for a jurisdiction to be able to exercise a subdivision parkland dedication ordinance.

#### Maps and Descriptions of Parks and Recreation Facilities

This parks and recreation plan is divided into separate sections addressing major parks and open space areas, local parks, and trails.

Major Parks and Open Space Areas. The provision of major parks to serve the urbanized areas is essential to the physical and mental well-being of all segments of their populations, as these parks form alternatives to the often intense pace of urban life. Major parks provide areas where people can enjoy active and passive recreation not otherwise available, such as nature studies, camping, or just observing the natural landscape.

The preservation of lands for outdoor recreation also assists in the conservation of the County's unique natural, scenic, or cultural resources. Such preservation provides for recreational opportunities while helping to maintain the quality of life for county residents and visitors. Major park facilities in the County are owned

by the Federal and State governments, along with an extensive system operated by the East Bay Regional Park District. Additionally, there are some municipal facilities which are major parks. For the purpose of this portion of the Plan, the following definitions shall apply:

**Major Parks** are intended to provide a broad range of recreational opportunities, which may include hiking, bicycling, equestrian use, fishing, swimming, camping or group sports, etc. Preservation of historical structures also is included within this grouping.

**Major Open Space Areas** are lands within public ownership of significant undeveloped areas. The major purpose of these areas is to protect the uniqueness of these lands through passive recreational activities that do not require substantial facilities or improvements. Agriculture is an appropriate secondary use.

The existing and proposed Major Parks and Major Open Space Areas are shown on Figure 9-3. While major parks usually cover areas over 100 acres, shoreline and marsh areas may be much smaller, reflecting the unique areas they protect. With recent voter approval of State and regional park bonds, this plan anticipates the expansion of existing major park and open space facilities.

The two primary agencies administering major parks in the County are the State Department of Parks and Recreation and the East Bay Regional Park District. The State Department of Parks and Recreation operates two parks, Mt. Diablo State Park and Franks Tract State Recreation Area. These parks are intended to serve the population of the State as a whole, not just residents of Contra Costa County.

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While no county standard is included for Major Parks or Open Space areas, there are numerous areas within the County which deserve to be placed in new parks or added to existing ones. This plan endorses the expansion of Major Park and Open Space Areas to protect the unique resources of the County.

New opportunities for parks arise when additional lands are acquired for other purposes, such as the proposed Los Vaqueros Reservoir in Southeast County. It is anticipated that if one or more reservoirs are constructed within that area, there will be recreational facilities associated with the water project. A park symbol is shown on the Parks and Recreation map to recognize potential parks and recreation uses within the Los Vaqueros watershed area.

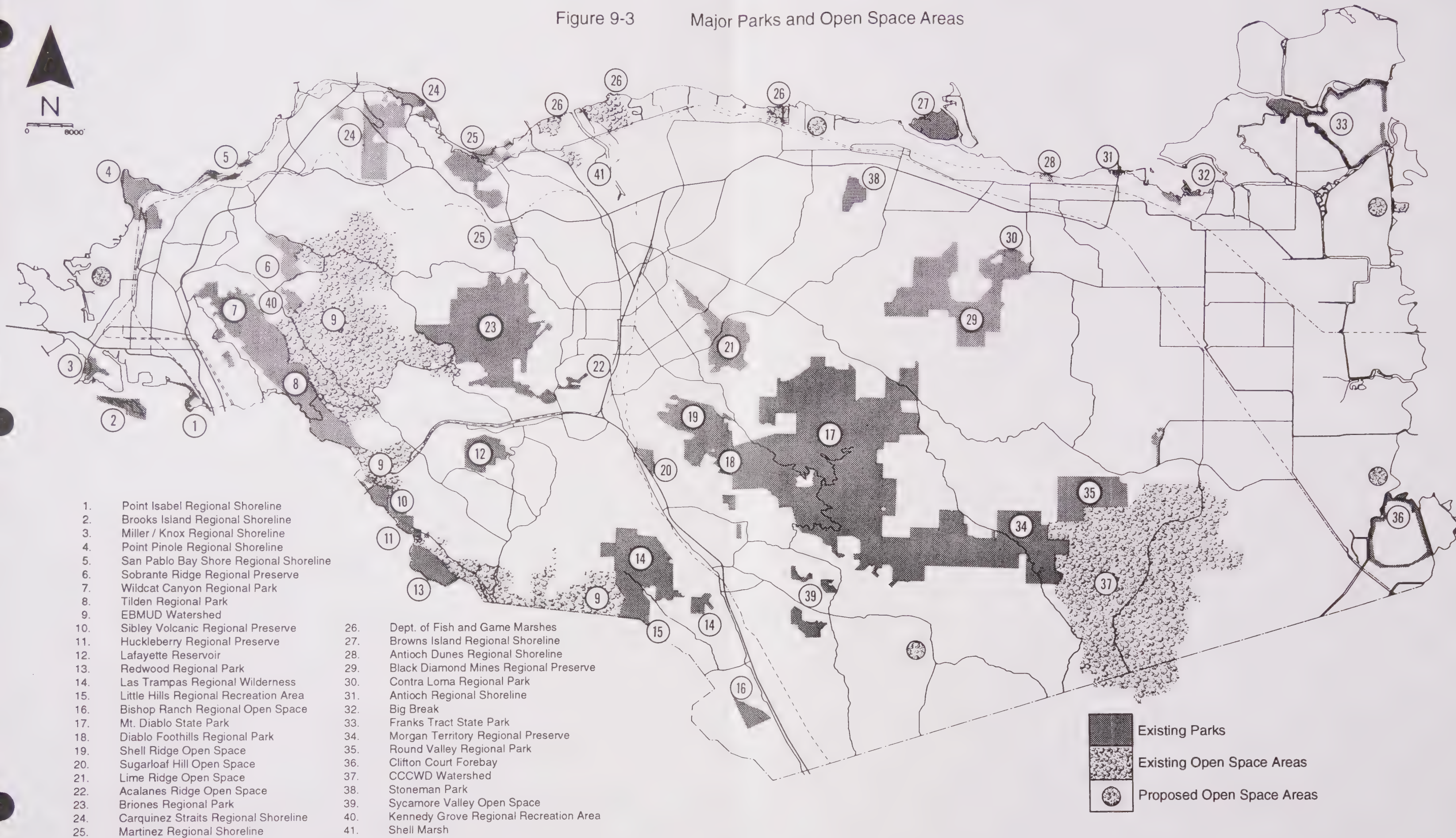
There are other locations within the Southeast County area which have potential for development of major new recreational facilities; however, plans for their acquisition are just now being realized. At the time that the East Bay Regional Park District or another public agency is prepared to consider seriously the establishment of such facilities, these proposed facilities should be reviewed by the County to ensure compatibility with the concepts found in this plan and with adjacent existing land uses. Among the sites with such potential are Round Valley, the Byron Hot Springs, and the Vasco Caves area.

**Local Parks.** Local parks are areas of open space set aside for recreational use and are located within an acceptable distance from the people they serve. They serve as the focal points for neighborhoods and communities where people can meet and enjoy their leisure time together. Local parks provide a visual counterpoint to the often intense developed areas in which they are located. The more intense the development, the greater the need for adequate parks.

This plan for local parks specifies the County's standards and general locations of existing and proposed facilities. While the map of local park facilities (Figure 9-4) shows a county-wide distribution, it has an enforceable effect for the unincorporated area only. Where differences exist between this plan and those of a city, the city plans will take precedence within incorporated areas.



Figure 9-3 Major Parks and Open Space Areas





For the purpose of this plan, local parks are differentiated into neighborhood and community parks. Neighborhood parks generally have service areas equivalent to elementary schools, while community parks more commonly are equivalent to high school service areas. The size and location of local parks will vary depending on the population density of the area to be served. The size of a park will vary with the population to be served. The greater the proposed population, the greater the size of the park necessary to serve a given area.

County park standards for local and community parks and types of play areas are shown on Table 9-1.

Most local parks are currently located within incorporated areas. The County requires that special units of government, e.g. County Service Areas, be established to maintain these local facilities.

County Service Areas are preferred over autonomous units of government, due to the ease with which their boundaries can be modified or eliminated during incorporation. In areas planned for development, efforts should be made to encourage new County Service Areas to provide for maintenance of local parks.

County Service Areas are preferred over autonomous units of government, due to the ease with which their boundaries can be modified or eliminated during incorporation. In areas planned for development, efforts should be made to encourage new County Service Areas to provide for maintenance of local parks.



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TABLE 9-1  
COUNTY PARK CRITERIA

1. Playlots

- a. Site Area: 2,000-5,000 square feet for either an independent site or that portion of a playground developed as a playlot.
- b. Location: Independent sites located in the centers of apartment projects or planned unit developments which they are intended to serve.
- c. Facilities: Basic facilities include playground equipment for preschool children (swings, slides, climbing apparatus) and shaded bench area for parents. Additional facilities include sandboxes, spray pools, and both grassed and hard-surfaced play areas.

2. Playgrounds

- a. Site Area: Independent site -- 3-7 acres; in conjunction with park or school -- 3-5 acres.
- b. Location: Central to neighborhood served, preferably accessible without having to cross traffic arterials or railroads.
- c. Facilities: Basic facilities include playground equipment for elementary school children plus both hard-surfaced and grassed play areas. Additional facilities include playlot, shelter, sports and game areas (baseball diamonds, tennis courts, and wading and swimming pools).
- d. Service Radius: One-half mile; larger in areas of low population density or unusual topography.
- e. Association: Playgrounds should be developed in conjunction with elementary schools and parks for maximum effectiveness. Location within independently-situated play fields and parks is also desirable.

3. Playfields

- a. Site Area: 10 acres minimum, 15 acres desirable; 12 acres minimum, 17 acres desirable for sites with playground facilities.
- b. Location: Central to four or five neighborhoods (roughly four or five elementary school service areas).

TABLE 9-1 (Continued)

- c. Facilities: Primary facilities include game courts, sports fields, lawn games area. Secondary facilities include swimming pool, shelter house or recreation building, parking lot.
  - d. Association: Playfields adjoining high school sites or community parks are particularly appropriate. Playlots and playground should also be included.
4. Neighborhood Parks
- a. Acreage/Population: 2.50 acres per 1,000 population.
  - b. Site Area: Without playground -- 3-7 acres; with playground -- 6-8 acres; with playfield -- 12-17 acres.
  - c. Location: Identical to playgrounds -- center of neighborhood.
  - d. Facilities: (Park area only) Landscaped open space (trees, grass, shrubbery), benches and tables, and walks.
  - e. Service Radius: One-half mile.
  - f. Association: Neighborhood parks are best located adjacent to playgrounds, playfields and elementary schools. They may also contain a neighborhood recreation center.
5. Community Parks
- a. Acreage/Population: 1.50 acres per 1,000 population.
  - b. Site Area: Independent sites -- 15-20 acres. With playgrounds and playfield -- minimum 25 acres, recommended 40-50 acres.
  - c. Location: In the center of a group of neighborhoods. The site should have some natural features of interest such as water frontage or rough topography if possible.
  - d. Service Radius: Two miles.
  - e. Facilities: Both landscaped and natural open space, playgrounds and playfields, parking, special facilities such as golf, boating and swimming, and a community center.
-

**Trails and Paths.** Trails provide a linear corridor that is primarily for pedestrian, equestrian and bicycle use. Most trails in the County are established for recreational use, though increasingly some are utilized for commute and transportation purposes. As such this plan is functionally also a part of the County's Transportation and Circulation Element. Note that there are additional policies relating to the transportation aspect of on-street bikeways and trails in the Transportation and Circulation Element. This plan is divided into three separate components dealing with equestrian, hiking and bicycle facilities.

In many cases, trails can be utilized for more than one purpose. For ease of presentation, these three trail plan components are discussed and mapped separately. While the trails plan is county-wide and relies heavily on municipal plans in these areas, not all trails within those areas are shown; only the regional links are included. This plan encourages development of local feeder trails and paths to provide an interconnected system which can work as a circulation component as well as providing recreational opportunities. The County Trail Plan focuses on non-motor oriented facilities in order to maintain peace and tranquility for its users.

The Bicycle Trails Plan is shown on Figure 9-5. Two types of bike trails are shown on the map: primary and secondary paths. The following definitions are to be used in this plan:

**Bicycle Trails.** Trails of this class connect residential neighborhoods and major destinations of bicycle traffic. They will normally accommodate high volumes of short distance traffic as well as inter-community movement. Ultimately, Primary Bicycle Paths are expected to be developed on their own pathways which are physically separated from other trails or from vehicular traffic.

The Hiking Trails Plan is shown on Figure 9-6. The following definitions are used in the plan:

**Hiking Trail.** All trails included in this plan are major, or primary, trails. These are intended for external travel by individuals or groups of varying skills and ages. They typically connect important trail use destinations such as major parks and points of special interest. Hiking trails may be paved or, preferably, surfaced with resilient materials to keep down dust and permit travel in all weather.



Figure 9-4 Local Parks

NORTH  
1"=16,000'

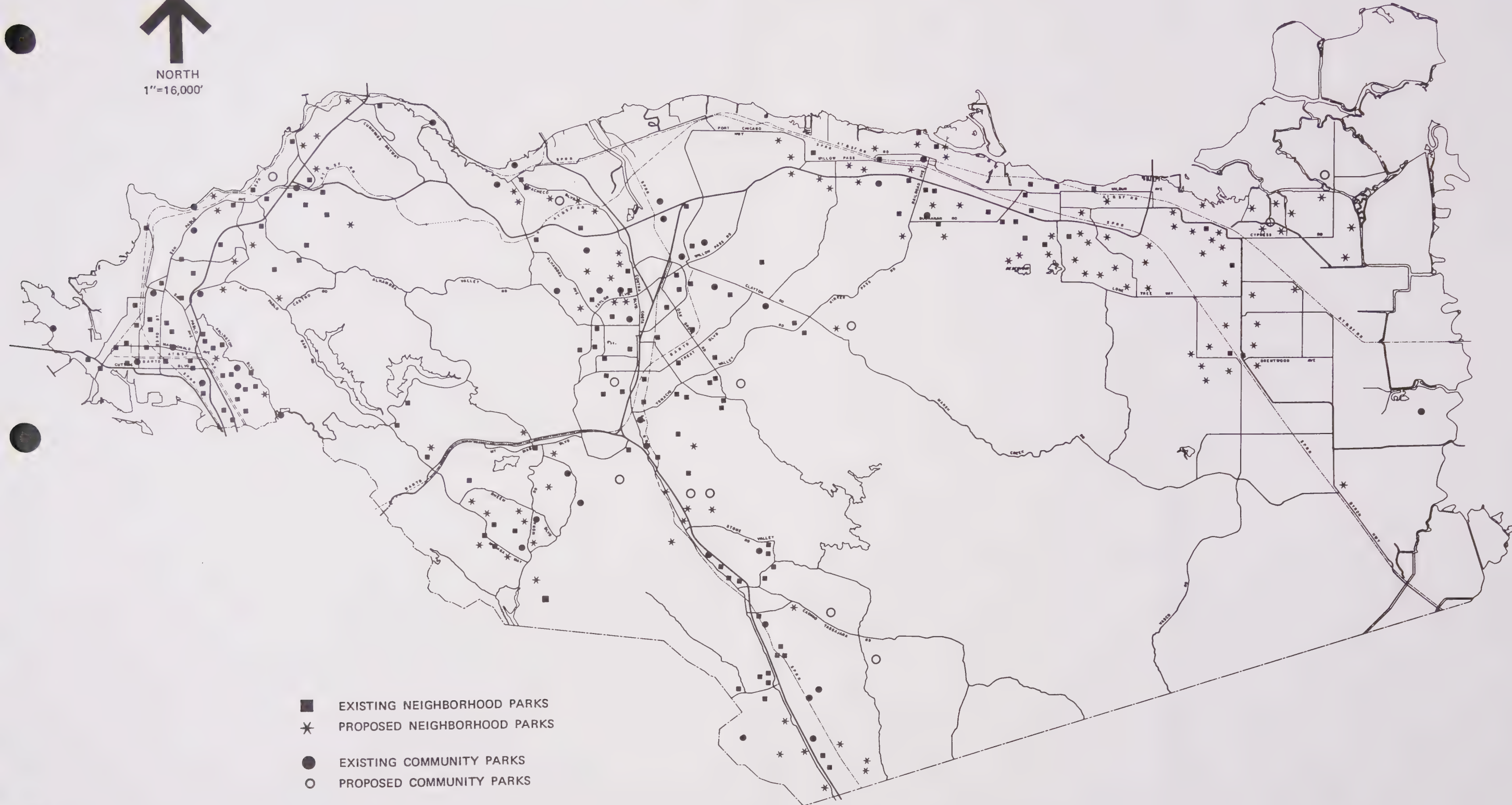




Figure 9-5 Bicycle Trails

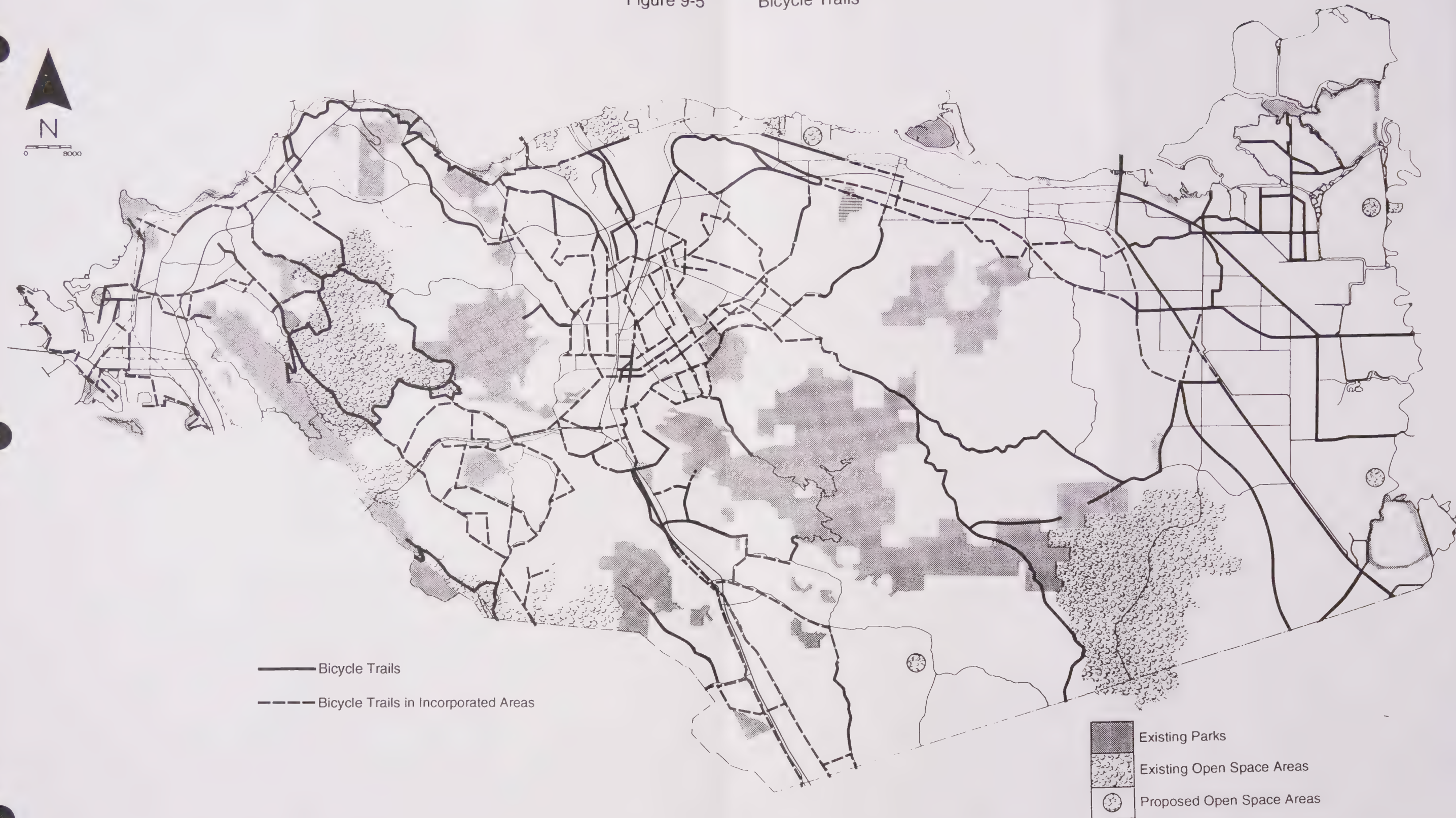






Figure 9-6 Hiking Trails







The Riding (Equestrian) Trails Plan is shown on Figure 9-7. The following definitions are used in the plan:

**Riding Trail.** All trails included in this plan are major, or primary, trails. These are intended for extended travel by riders of varying skills and age groups. They typically connect important trail use destinations such as major parks and points of special interest. Riding trails usually are not paved, but preferably are surfaced with resilient material to keep down dust and permit travel in all weather.

**Staging Areas.** Staging areas are facilities for the assembly of trail user groups and for the parking of vehicles and accessory vehicles such as horse trailers. They need to be located adjacent to both trails and access roads. These areas also should be considered to be trail features and installed by either trail-providing agencies or the user groups. This is not a complete mapping of appropriate areas but an initial listing.

**Private Recreational Facilities.** Increasingly, private developments are being considered which provide on-site recreational facilities to serve project residents. These facilities provide project amenities and are effective sales tools. They may limit the effect of new homes on the existing public park facilities; but, generally, they provide compatible facilities to those of the public parks. For this reason, credit from the park dedication ordinance requirements should only be given where it is clear that private developments provide facilities which are open to and serve the public.

This plan encourages the placement of such facilities in private developments and encourages the development of pathways that are integrated in location and design with those of adjacent projects.

Additionally, there are current uses, such as sanitary landfills or quarries, which upon completion of their active lives, would enable all or part of the site to revert to recreational and open space uses. Where the public health can be guaranteed, the preservation of these areas for recreational and open space purposes should be considered.

In appropriate locations, the provisions of outdoor recreational facilities, e.g. private campgrounds, could add to the recreational diversity of the County. Design of such facilities needs to be of a high standard to be compatible with the adjacent rural environment.

There are resource areas within the County, e.g., the San Pablo Bay and throughout the Delta, where substantial potential exists for private recreational development. These should be encouraged if the projects include programs for environmental enhancements to their immediate areas and are limited to extensive recreational facilities.

Additional marinas to serve the Delta and the Bay may be permitted in select areas if they meet the criteria included in the following "Implementation" section.

The joint use of recreational facilities is encouraged. For example, significant potential exists for trails to be developed along PG&E and utility pipeline rights-of-way.

The County's role in park and trail planning covers a broad spectrum of concerns. The County prepares plans for recreational facilities that serve the County population as a whole and work toward coordination of park and recreation efforts of Federal, State, regional and local agencies. At the same time, the County is directly responsible for recreational planning for the unincorporated communities.

In order to ensure that the recreational needs of present and future residents of the County are provided for during the Planning period, the following goals and policies were developed.

#### PARKS AND RECREATION FACILITIES GOALS

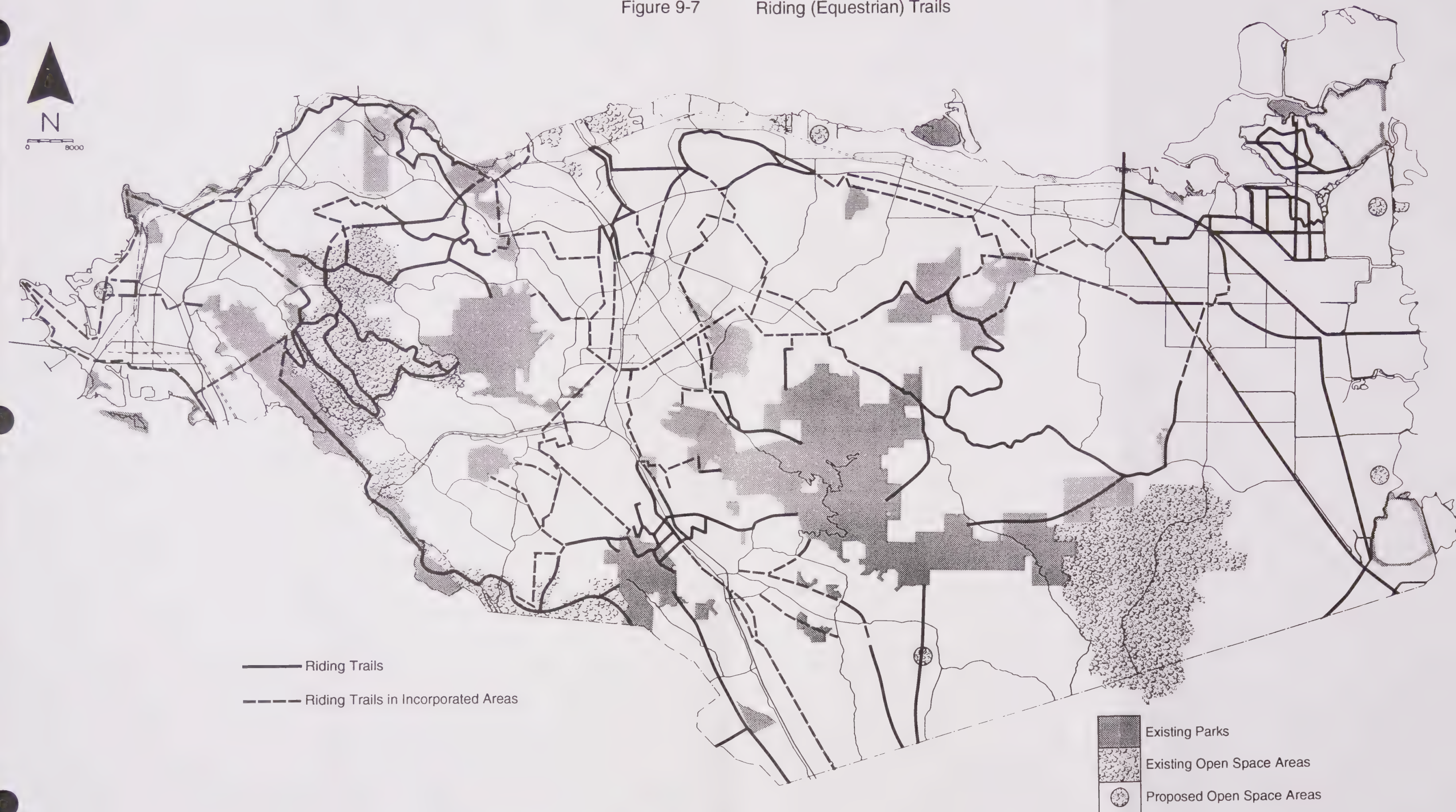
- 9-H. To develop a sufficient amount of conveniently located, properly designed park and recreational facilities to serve the needs of all residents.
- 9-I. To develop a system of interconnected hiking, riding and bicycling trails and paths suitable for both active recreational use and for the purpose of transportation/circulation.
- 9-J. To promote active and passive recreational enjoyment of the County's physical amenities for the continued health, safety and welfare of the citizens of the County.
- 9-K. To achieve a level of park facilities of four acres per 1,000 population.

#### PARKS AND RECREATION FACILITIES POLICIES

- 9-32. Major park lands shall be reserved to ensure that the present and future needs of the County's residents will be met and to preserve areas of natural beauty or historical interest for future generations. Apply the parks and recreation performance standards in the Growth Management Element.
- 9-33. A well-balanced distribution of local parks, based on character and intensity of present and planned residential development and future recreation needs, shall be preserved.
- 9-34. Park design shall be appropriate to the recreational needs and access capabilities of all residents in each locality.



Figure 9-7 Riding (Equestrian) Trails







- 9-35. Regional-scale public access to scenic areas on the waterfront shall be protected and developed, and water-related recreation, such as fishing, boating, and picnicking, shall be provided.
- 9-36. As a unique resource of State-wide importance, the Delta shall be developed for recreation use in accordance with the State environmental goals and policies. The recreational value of the Delta shall be protected and enhanced.
- 9-37. Public funds from agencies such as the Department of Fish and Game shall be utilized to purchase levees and acquire easements.
- 9-38. Public trail facilities shall be integrated into the design of flood control facilities and other public works whenever possible.
- 9-39. Recreational development shall be allowed only in a manner which complements the natural features of the area, including the topography, waterways, vegetation and soil characteristics.
- 9-40. Recreational activity shall be distributed and managed according to an area's carrying capacity with special emphasis on controlling adverse environmental impacts, such as conflict between uses and trespass. At the same time, the regional importance of each area's recreation resources shall be recognized.

## PARK AND RECREATION FACILITIES IMPLEMENTATION MEASURES

### Ordinances and Programs

- 9-q. Complete a comprehensive study of all open space lands in the County to determine the areas that are most suitable for future park acquisition.

### Development Review Process

- 9-r. Require that new development meet the park standards and criteria included in the growth management program and set forth in Table 7-3. Ensure that credit for the park dedication ordinance requirements be given for private recreation facilities only after a finding has been adopted that the facilities will be open to and serve the public.
- 9-s. Permit additional marinas to serve the Delta and the Bay in select areas if they meet the following criteria:
  - 1) where projects can be clustered and located adjacent to similar uses;
  - 2) along waterways having an adequate channel width as defined by the State Harbors and Navigation Code;
  - 3) in areas having adequate public vehicular access;
  - 4) where off-site improvements, such as required access roads, can be assigned to development;

- 5) where adequate on-site sewage disposal can be provided;
- 6) where located in an area served by a public fire protection district; and
- 7) when such uses will not conflict with adjacent agricultural uses.

#### Intergovernmental Coordination

- 9-t. Coordinate with the various school districts in the County to provide for the joint use of recreation facilities.
- 9-u. Coordinate funds and programs administered by County government and other agencies, such as the East Bay Regional Park District, to obtain optimum recreation facilities development.
- 9-v. Develop a comprehensive and interconnected series of hiking, biking and riding trails in conjunction with cities, special districts, public utilities and county service areas.

#### Funding

- 9-w. Form a county-wide committee to explore funding sources for recreation and open space to support regional, community and local park and trails on a county-wide basis.
- 9-x. Work with local unincorporated communities to determine the means of providing local park services where the need presently exists, as well as when development occurs.
- 9-y. Increase the park dedication fee to a level which approaches the local park dedication standards called for in this Plan.







## 10. SAFETY ELEMENT

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## 10. SAFETY ELEMENT

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### 10.1 INTRODUCTION

In accordance with the State General Plan Guidelines, the safety element includes maps of known hazards including seismic and other geologic hazards, and other hazards described below. It addresses evacuation routes; peak-load water supply requirements; and minimum road widths and clearances around structures, as they relate to identified fire and geologic hazards. Other locally relevant safety issues, including hazardous materials spills and water quality protection are also discussed in this element. The County Hazardous Waste Management Plan (HWMP) is incorporated herein by reference, and the goals and policies of the HWMP related to the Safety Element are stated in this section.

### LEGAL AUTHORITY

As directed by the State legislature, this element of the General Plan is intended to further "the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides, subsidence and other geologic hazards known to the legislative body; flooding; and wild land and urban fires (Government Code Section 65302(g))." (Useful Safety Element definitions and information may be found at the end of this element.) In this General Plan, flooding and flood control are discussed in more than one element. For information, goals and policies regarding these issues, the reader is directed to Sections 7.8, Drainage and Flood Control; and 10.8, Flood Hazards.

This element identifies the hazards that Contra Costa County and its cities must consider when making land use decisions. Based on analysis of local hazards and an evaluation of their associated risks to life and property, this element recognizes a degree of acceptable risk and contains policies for risk management. The element also provides the basis for planning and coordination of risk management with other divisions of County government, the incorporated cities, and State and federal agencies in order to ensure that public projects, plans and programs of other government agencies reflect public safety issues for Contra Costa County residents.

## 10.2 RELATIONSHIP TO OTHER ELEMENTS

The Safety Element is expected affect land use policies and hence is coordinated with the Land Use Element. Safety considerations may affect the Open Space/Conservation and Public Facilities/Services Elements, and may present additional justification for lowering density in conjunction with land use decisions, based partly on seismic and landslide risk. The Safety Element is also related to the Housing, Circulation and Transportation; and Public Facilities/Utilities Elements in that it discusses hazards that may affect decision-making in these issue areas.

## 10.3 RELATIONSHIP TO OTHER GENERAL PLAN DOCUMENTS

The goals, policies and implementation measures contained in this element are intended to guide planning for public and private projects that are subject either to approval of the County planning agency, or to review by County staff, although they may be under the jurisdiction of other public agencies operating in the County. Such goals, policies and implementation measures are intended to be consistent with the other elements of the General Plan, as well as with other planning documents, including the County HWMP (1988).

## 10.4 GENERAL PUBLIC SAFETY ASSUMPTIONS

The concept of public safety expressed in this element, and the proposed policies and programs to achieve a suitable degree of public protection, are based on the following assumptions:

- o Hazards are an unavoidable aspect of life. Not all hazards can be eliminated, nor can every degree of risk be eliminated for any specific hazard.
- o Public policy and action are appropriate measures to mitigate significant hazards to the general public or to a large part of the population. Such hazards may have a relatively low risk of occurrence but would be disastrous should they occur, or they may have a relatively high risk of occurrence, such as minor landslides, but would not be disastrous. Hazards of the latter type can be due to persistent safety problems in the County.
- o Through the dissemination of information and public discussion, satisfactory judgments can be made as to the levels of monetary, environmental and social costs appropriate to mitigate hazards to public safety.

The policies of this element are not intended to remove all risks associated with the specific hazards discussed, but when implemented will reduce risks to life and property from certain natural and man-made events and conditions, and will lead to greater life safety in case of general disaster.



The determination of acceptable and unacceptable risk requires judgments based on weighing several factors including the nature of the hazard, the frequency, or risk, of a damaging event associated with the hazard, and the relative number of persons exposed to the risk. The degree or intensity of any specific hazard is a major consideration in public mitigation efforts. Thus, hazards with a high life-loss potential are less acceptable than hazards which primarily affect property, and hazards which could impact entire communities are less acceptable than hazards which may impact relatively few persons. Only minimal risk to critical facilities and functions (including water supply, emergency services, evacuation routes, and medical and mass care facilities) is considered acceptable since these facilities and functions are critical to disaster recovery for entire communities.

Exposure to the natural hazards considered in the Element is often voluntary; persons who choose to purchase property on unstable ground or subject to wildfire and flooding are usually aware of the potential hazard. On the other hand, exposure to some risks, such as exposure to hazardous substances, is usually involuntary. Voluntarily taken risks are not necessarily acceptable from the public point of view because property owners have expectations that grading and building regulations, fire services, and flood control works will provide a significant degree of risk reduction. The greater capital and maintenance costs of public facilities in hazardous areas, represent a disproportionate share of tax revenues for hazard mitigation.

## 10.5 SAFETY ELEMENT ORGANIZATION

This chapter of the General Plan is divided into six sections that present background information, policies, maps, and implementation measures regarding:

- o seismic hazards (earthquakes and faults, and the effects of strong earthquakes, such as liquefaction);
- o landslides and associated hazards;
- o flooding hazards, including the impacts of the "greenhouse effect," subsidence, and dam or levee failure;
- o hazardous material uses, including the transport and storage of hazardous materials, pipelines, etc.;
- o dangers to water quality and public water supplies; and
- o disaster planning and the provision of public protection services.

## 10.6 SEISMIC HAZARDS

### INTRODUCTION

Earthquakes are sudden releases of strain energy stored in the earth's bedrock. The great majority of earthquakes are not dangerous to life or property either because they occur in sparsely populated areas or because they are small earthquakes which release relatively small amounts of energy. However, where urban areas are located in regions of high seismicity, damaging earthquakes are expectable if not predictable events. Seismic risk is assumed by every occupant and developer in Contra Costa County because the County is within an area of high seismicity; the San Francisco Bay Region has been impacted by more than ten severe earthquakes during historic time.

The major effects of earthquakes are ground shaking and ground failure. Severe earthquakes are characteristically accompanied by surface faulting and less commonly by tsunamis and seiches, further described in the "Flood Hazards" section of this chapter. Flooding may also be triggered by dam or levee failure resulting from an earthquake, or by seismically-induced settlement or subsidence. All of these geologic effects are capable of causing property damage and, more importantly, risks to life and safety of persons.

A fault is a fracture in the earth's crust along which the rocks on opposite sides have moved relative to each other. By definition, active faults have a high probability of future movement. With regard to planning and development, two aspects of fault displacement should be considered: (a) the effects that sudden movement along faults may have on structures built across their traces, and (b) the relatively slow effects of fault creep on structures built across their traces. Fault displacement involves forces so great that the only means of limiting damage to man-made structures is to avoid the traces of active faults. Any movement beneath a structure, even on the order of an inch or two, could have catastrophic effects on the structure and its service lines.

Energy release events on an active fault may alternate from one trace to another, and movement on a master fault may trigger adjustments on minor, subsidiary faults. Because of these factors, fault traces which intersect or parallel known active faults warrant special consideration during project review.

For the purpose of this Safety Element, earthquakes are classified according to the descriptive names listed in Table 10-1.

Earthquake planning and seismic review often use a set of descriptions of predicted earthquake capabilities called "maximum credible earthquake" and "maximum probable earthquake." The maximum credible earthquake is the maximum earthquake that appears capable of occurring. The maximum probable earthquake is the maximum earthquake believed likely to occur during a 100-year interval. The maximum credible and maximum probable earthquakes for various faults in the county are defined later in this chapter.

The overall energy release of an earthquake is its most important characteristic, but not the only criterion required for seismic safety planning or construction design. Other important attributes include an earthquake's duration, its related number of significant stress cycles and its accelerations. Structures capable of withstanding more powerful earthquakes can fail in a less severe earthquake of long duration or due to especially high local accelerations.

### Local Geology

In order to understand the fault system in Contra Costa County, where earthquakes are most likely to occur, a brief discussion of the local geology is necessary. Figure 10-1 illustrates the generalized geology of the County and the accompanying Table 10-2 summarizes the County's "geologic column" and geologic time scale.



TABLE 10-1  
EARTHQUAKE SIZE DESCRIPTIONS

| <u>Descriptive Title</u> | <u>Richter<br/>Magnitude</u> | <u>Intensity Effects<sup>1</sup></u>  |
|--------------------------|------------------------------|---|
| Minor Earthquake         | 1 - 3.9                      | Only observed instrumentally or felt only near the epicenter. Modified Mercalli Scale, intensity IV or less.  |
| Small Earthquake         | 4 - 5.9                      | Surface fault movement is small or does not occur. Felt at distances of up to 20 to 30 miles from epicenter. May cause damage (Modified Mercalli Scale, VII) in small area. |
| Moderate earthquake      | 6 - 6.9                      | Moderate to severe earthquake range; fault rupture probable.  |
| Major earthquake         | 7 - 7.9                      | Landslides, liquefaction and ground failure triggered by shock waves.   |
| Great earthquake         | 8 - 8+                       | Damage extends over a broad area, depending on magnitude and other factors. Maximum intensity ranges from VIII to XII on the Modified Mercalli Scale.                       |

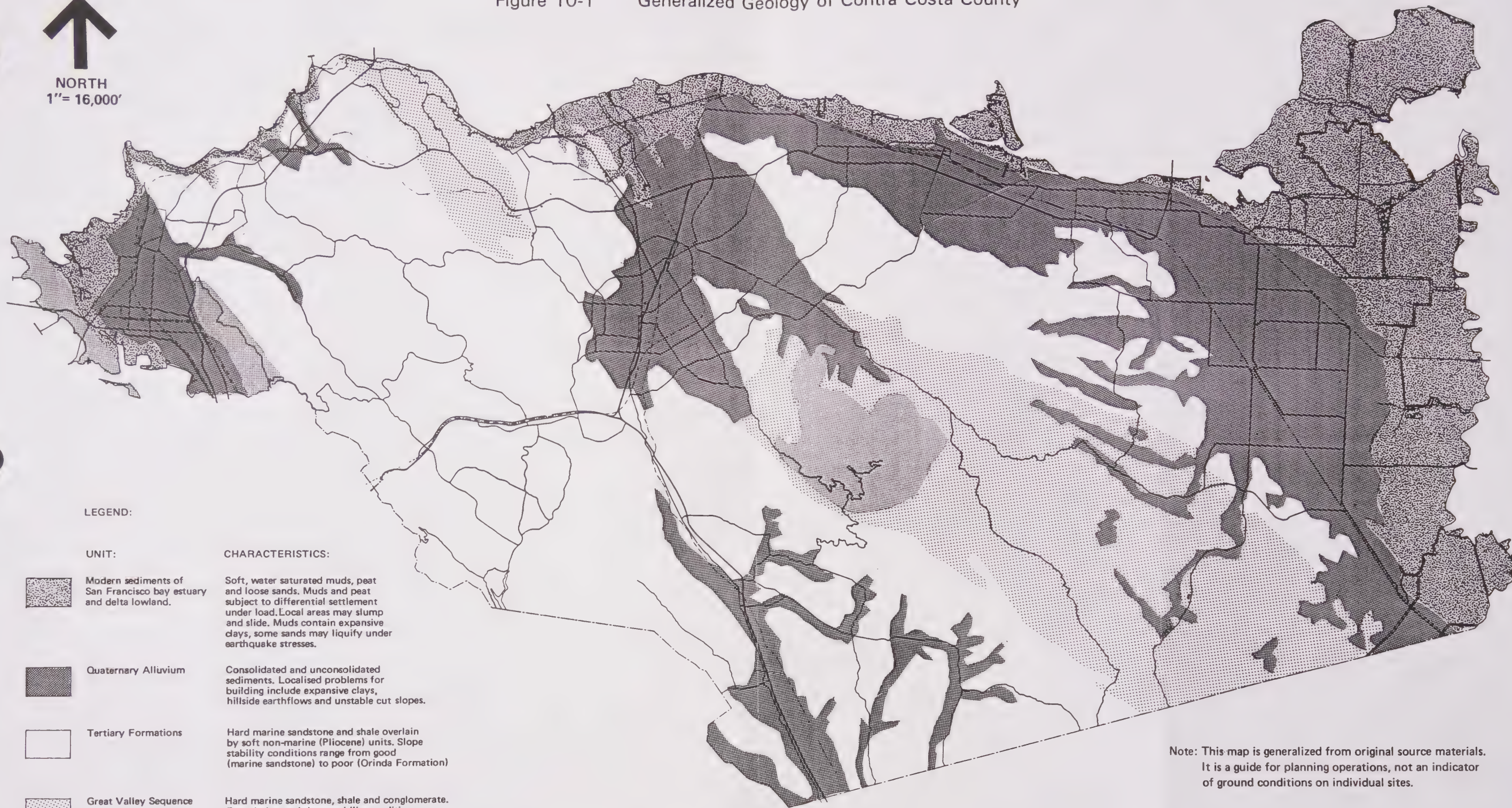
Source: Compiled by Contra Costa County Community Development Department.



Figure 10-1 Generalized Geology of Contra Costa County



NORTH  
1" = 16,000'



LEGEND:

UNIT:

CHARACTERISTICS:



Modern sediments of San Francisco bay estuary and delta lowland.

Soft, water saturated muds, peat and loose sands. Muds and peat subject to differential settlement under load. Local areas may slump and slide. Muds contain expansive clays, some sands may liquify under earthquake stresses.



Quaternary Alluvium

Consolidated and unconsolidated sediments. Localised problems for building include expansive clays, hillside earthflows and unstable cut slopes.



Tertiary Formations

Hard marine sandstone and shale overlain by soft non-marine (Pliocene) units. Slope stability conditions range from good (marine sandstone) to poor (Orinda Formation)



Great Valley Sequence

Hard marine sandstone, shale and conglomerate. Foundation and slope stability conditions good to fair subject to sliding where sheared, fractured or contorted.



Franciscan Formation

Hard sandstone, chert and shale, metamorphic rock and basalt. Forms core of Diablo Range and Briones Hills Foundation support and slope stability in fresh rock good, subject to sliding where sheared.

Note: This map is generalized from original source materials. It is a guide for planning operations, not an indicator of ground conditions on individual sites.

Source: Map compiled from maps from the U.S. Geological Survey and from the California Division of Mines and Geology







TABLE 10-2  
GEOLOGIC TIME SCALE  
GENERALIZED STRATIGRAPHIC SECTION  
AND LITHOLOGIC CHARACTERISTICS

| <u>Generalized Stratigraphic Section</u>           |  |  |
|--|--|--|
| <u>Geologic Age<br/>(Absolute Age)<sup>1</sup></u> | <u>Formation Name</u>  | <u>General Lithologic Description</u>  |
| Quaternary<br>Holocene &<br>Pleistocene<br>(0-2)   | Alluvium   | Includes all types of alluvial deposits. In Central Coast Range, it is separated from Contra Costa Group by an angular unconformity.   |
| Tertiary<br>Pliocene<br>(2-5)                      | Contra Costa Group<br>Bald Peak Basalt<br>Siesta Formation<br>Moraga Formation<br>Orinda Formation                       | Conglomerate, sandstone, siltstone with minor amounts of limestone and tuff; rapid facies changes. Some basalt and andesite (volcanic) flows. Clastics are semi-consolidated and contain montmorillonite clay. Topographic form highly variable. |
| Miocene<br>(5-24)                                  | San Pablo Group (Diablo Range)<br>Neroly Sandstone<br>Cierbo Sandstone<br>Briones Sandstone                              | Predominantly marine sandstone with interbeds of shale, siltstone and minor conglomerate. Upper part includes some non-marine beds (e.g., Diablo Formation of Weaver, 1944)  |
|  | Monterey Group (Briones Hills)<br>Rodeo Shale<br>Hambre Sandstone<br>Tice Shale<br>Claremont Shale<br>Sobrante Sandstone | Siliceous shale and fine-grained sandstone. Some zones of rhythmically bedded chert and shale. Bituminous in places. Underlies moderately steep to steep hillsides in Briones Hills.   |
| Oligocene<br>(24-37)                               | San Ramon Formation  | Tuffaceous sandstone, tuff, minor conglomerate and siltstone.  |
| Eocene<br>(37-58)                                  | Markley Formation<br>Nortonville Shale<br>Domengine Sandstone<br>Meganos Formation                                       | Predominately indurated bedrock including shale, siltstone and sandstone. Montmorillonitic clay shales, unstable.  |
| Paleocene<br>(58-66)                               | Martinez Formation   | Marine, Glauconite sandstone and shale. Shale similar to Eocene.   |

TABLE 10-2 (Continued)

| <u>Generalized Stratigraphic Section</u>  |                       |  |
|---|-----------------------|--|
| <u>Geologic Age<br/>(Absolute Age)<sup>1</sup></u>  | <u>Formation Name</u> | <u>General Lithologic Description</u>  |
| Cretaceous<br>(66-144)  | Great Valley Sequence | Great Valley Sequence: Massive beds of sandstone alternating with siltstone and shale. Minor conglomerate, limestone and lignite. Complex folding and faulting. Crops out in Briones Hills and Diablo Range.   |
| Cretaceous-Jurassic<br><br>(In part contemporaneous with Great Valley Sequence and Tertiary rocks.) | Franciscan Assemblage | Cretaceous-Franciscan: Rhythmically bedded graywacke Jurassic Assemblage sandstones, shale, siltstones, radiolarian chert, greenstone. Minor amounts of limestone and schist. Partially recrystallized and intruded by serpentine and associated igneous rocks. Strongly deformed. |

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<sup>1</sup>Units of absolute age are millions of years before present.

Modified after Radbruch (1969). Compiled by Contra Costa County Community Development Department.

**Note:** This table is generalized from original source materials. It is not an indicator of ground conditions on individual sites.

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The geology of Contra Costa County is dominated by several northwest trending fault systems which divide the County into large blocks of rock. For example, the Briones Hills are bounded by the Hayward fault on the west and elements of the Franklin-Calaveras fault system on the east. Within a particular block the rock sequence consists of (1) a basement complex of broken and jumbled pre-Tertiary sedimentary, igneous and metamorphic rocks; (2) a section of younger Tertiary sedimentary rocks and some volcanic rocks (flows and tuffs) which locally intertongue with and overlie the sedimentary section; and (3) surficial deposits including stream alluvium, colluvium (slopewash deposits at the foot of steeper slopes), slides, alluvial fans, and Bay Plain deposits. The character of each of these categories of rocks is summarized in Table 10-2.

From the perspective of seismic safety planning, the older, coarser, and well-drained materials tend to be stable during earthquakes, while younger, fine-grained and water-saturated deposits tend to be less stable. Colluvium is often marginally stable to unstable. A disproportionate share of landslides originate in colluvium.

Faults are seldom single cracks but are typically a series of quasi-parallel or en-echelon breaks that comprise zones. These breaks form networks composed of major and minor faults. A fault having recorded movement, or one which shows evidence of geologically recent displacement (within about the last 10,000 years), is regarded as "active" and is more likely to generate a future earthquake than a fault which shows no signs of recent movement. Along with the criteria for fault activity, the last time of faulting, based on geologic evidence, is used to assess fault activity. The historic record is so short, and earthquakes are so scattered, that they are used only as the surest indicator of fault activity.

#### General Inventory of Seismic Faults

Figure 10-2 shows the earthquake faults that have been mapped in the County and categorizes their recent activity. Further technical information is discussed in the appendix. Table 10-3 summarizes other available data on inferred active faults affecting Contra Costa County.

In the context of geologic evidence for activity, those faults which have been active during the Holocene period, approximately the last 10,000 years, are considered to be active faults, and those faults which have been active during the Quaternary period, approximately the last 3 million years, are considered to be potentially active faults. This serves to differentiate faults for which sufficient evidence of recent activity has been noted to explicitly include them as known geologic hazards, distinct from those faults for which recent displacement is known or suspected, and whose latest activity has not been determined, but may have been within approximately the last 10,000 years.



In addition to faults which have been classified as active or potentially active, there are others whose activity has not been clearly established by presently available information. Some of these faults are shown on Figure 10-2 and discussed in the appendix. Others remain to be studied.

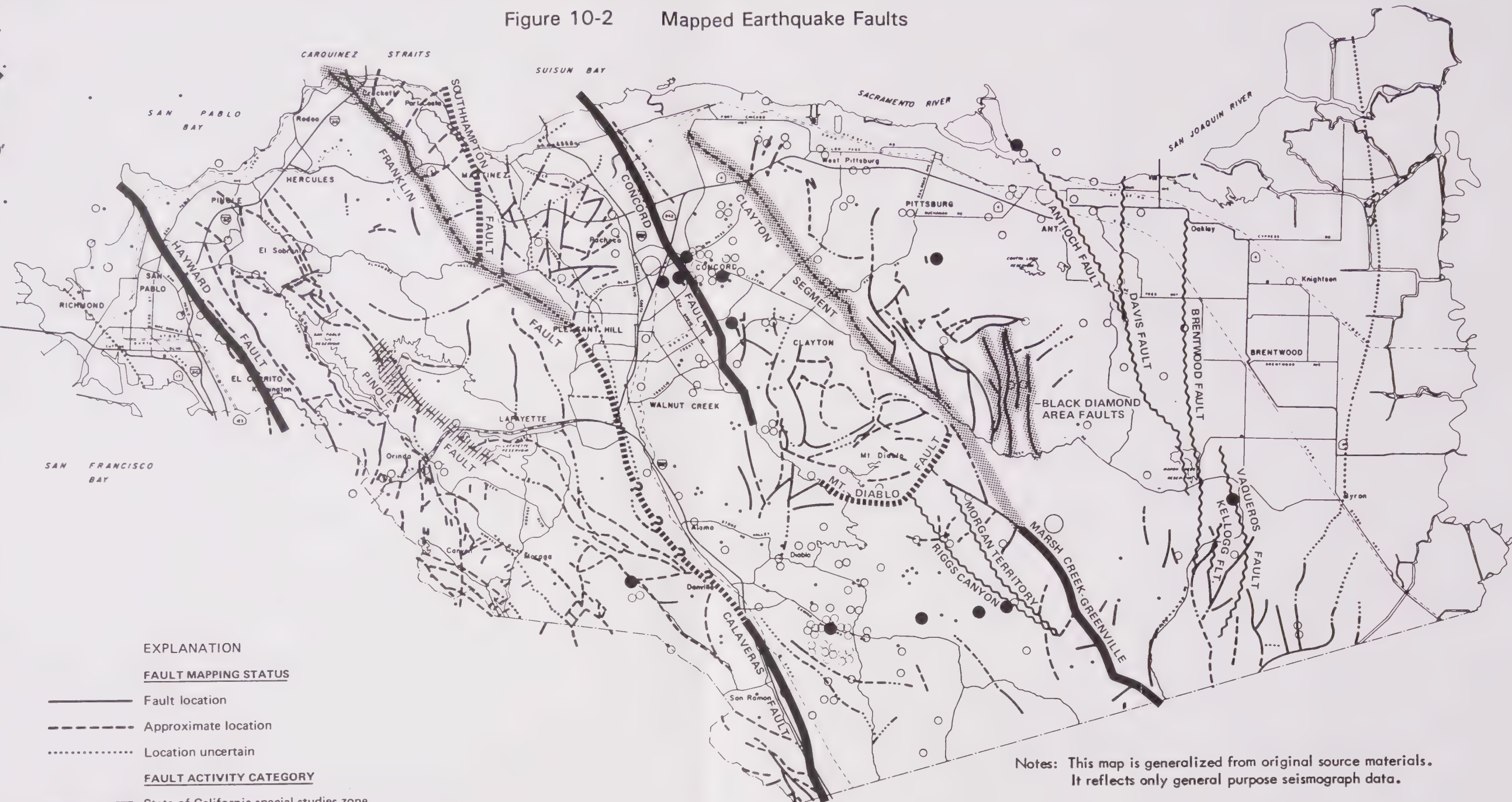
The County has been subjected to numerous seismic events, originating both on faults within the County and in other parts of the region. Six major Bay Area earthquakes have occurred since 1800 that definitely affected the County, and at least two of the faults that produced them run through or into the County. These earthquakes and the originating faults include the 1836 and 1868 earthquakes on the Hayward fault, and the 1861 earthquake on the Calaveras fault. Two earthquakes, in 1838 and 1906, originated on the San Andreas fault, west of the county near San Francisco or to the south, while one earthquake (with two major shocks) that caused some damage in the County occurred in 1872 and was centered north of Contra Costa County in the Vacaville-Winters area of Solano County. A smaller earthquake, centered near Collinsville in Solano County on a fault of uncertain identity, occurred in 1889. Figure 10-3 shows the locations for epicenters of earthquakes of Richter magnitudes as small as approximately 2.0 (which are unevenly reported because not all of them were recorded by enough stations to be located accurately), and for the period 1934-1980.

#### Existing Policies and Regulations Affecting Seismic Hazards

The major State legislation regarding earthquake fault zones is the Alquist-Priolo Special Studies Zones Act. The purpose of the Act is to regulate development near active faults to mitigate the hazard of surface fault rupture. Under the Act, the State Geologist is required to delineate "special studies zones" along known active faults in California. Cities and counties affected by the zones must regulate certain development projects within the zones. They must withhold development permits for sites within the zones until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting.

Figure 10-2 Mapped Earthquake Faults

  
NORTH  
1"=16,000'



- EXPLANATION
- FAULT MAPPING STATUS
- Fault location
  - - - Approximate location
  - ..... Location uncertain
- FAULT ACTIVITY CATEGORY
- █ State of California special studies zone
  - ▨ Faults with reported Late Pleistocene displacement but not in a state of California special studies zone
- FAULTS WITHOUT EVIDENCE OF LATE PLEISTOCENE OR HOLOCENE SURFACE DISPLACEMENTS
- ||||| Faults associated with earthquake swarms
  - ~~~~~ Faults inferred active on the basis of scattered small magnitude earthquakes near the trace of the fault
  - ▤▤▤▤▤ Faults inferred active on the basis of a tectonic model

Notes: This map is generalized from original source materials. It reflects only general purpose seismograph data.

The apparent scattering of the epicenters relative to fault locations is due to instrumentation and measurement problems as well as the dip of the faults and other factors.

Prepared by the Contra Costa County Community Development Department, Contra Costa County, California.





TABLE 10-3  
AVAILABLE DATA ON INFERRED ACTIVE FAULTS  
AFFECTING CONTRA COSTA COUNTY

| Fault Name                 | Historic Damaging Earthquakes | Historic Surface Faulting | Known Microseismic Activity             | <u>Estimated Maximum Credible Earthquake</u> |   | <u>Estimated Maximum Probable Earthquake</u> |                   |
|----------------------------|-------------------------------|---------------------------|---|--|---|--|-------------------|
|                            |                               |                           |   | Preferred magnitude                          | From literature   | Preferred magnitude                          | From literature   |
| San Andreas                | 1838, 1906                    | Creep and Surface Rupture | Yes                                     | 8.5  | 8.5 <sup>1</sup>  | 8.25   | 8.25 <sup>6</sup> |
| Hayward                    | 1836, 1868                    | Creep and Surface Rupture | Yes                                     | 7.25   | 7.0, <sup>1</sup> 6.9, <sup>2</sup><br>7.25, <sup>3</sup><br>7.0, <sup>5</sup><br>6.8-7.0, <sup>6</sup><br>7.6 <sup>7</sup>       | 6.5  | 6.75 <sup>6</sup> |
| Calaveras                  | 1861                          | Surface Rupture           | None in Contra Costa County             | 7.25   | 7.3, <sup>1</sup> 6.7, <sup>2</sup><br>7.3, <sup>3A,3</sup><br>6.5-7.2, <sup>6</sup><br>7.5 <sup>7</sup><br><br>6.25 <sup>5</sup> | 6.5  | 6.5 <sup>6</sup>  |
| Franklin                   | 1898?                         | None Known                | No                                      | 6.25   | 6.3, <sup>1</sup><br>7.25, <sup>3</sup>   | N/A  | N/A               |
| Concord                    | 1955                          | Creep                     | Yes                                     | 6.5  | 6.5, 4, <sup>5</sup><br>6.1-6.5, <sup>6</sup><br>6.4 <sup>7</sup><br><br>6.25, <sup>4,5</sup>                                     | 5.75   | 5.5 <sup>6</sup>  |
| Greenville-Clayton Segment | None Known                    | None Known                | No                                      | 6.25   | 6.5, <sup>4,5</sup>   | 5.5  | N/A               |
| Greenville-Marsh Creek     | 1980                          | Surface Rupture           | Yes                                     | 6.5  | 6.9, <sup>7</sup>   | 5.75   | 5.5 <sup>6</sup>  |
| Greenville-Segment Unknown |                               |                           |   |  | 5.5 <sup>4</sup>  |  |                   |
| Black Diamond Area         | None Known                    | None Known                | Scattered clusters in areas near faults | 5.5  |   | N/A  |                   |
| Antioch                    | 1889?, 1965                   | Reported Creep            | Yes                                     | 6.5  | 6.6, <sup>1</sup><br>5.75, <sup>4</sup> 6.5 <sup>6</sup>  | 5.75   |                   |

Table 10-3 (Continued)

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References:

<sup>1</sup>Wesson and Others (1975)

<sup>2</sup>Herd (1979)

<sup>3</sup>Slemmons and Chung (1982)

<sup>4</sup>Earth Science Associates (1982)

<sup>5</sup>Earth Science Associates (1983)

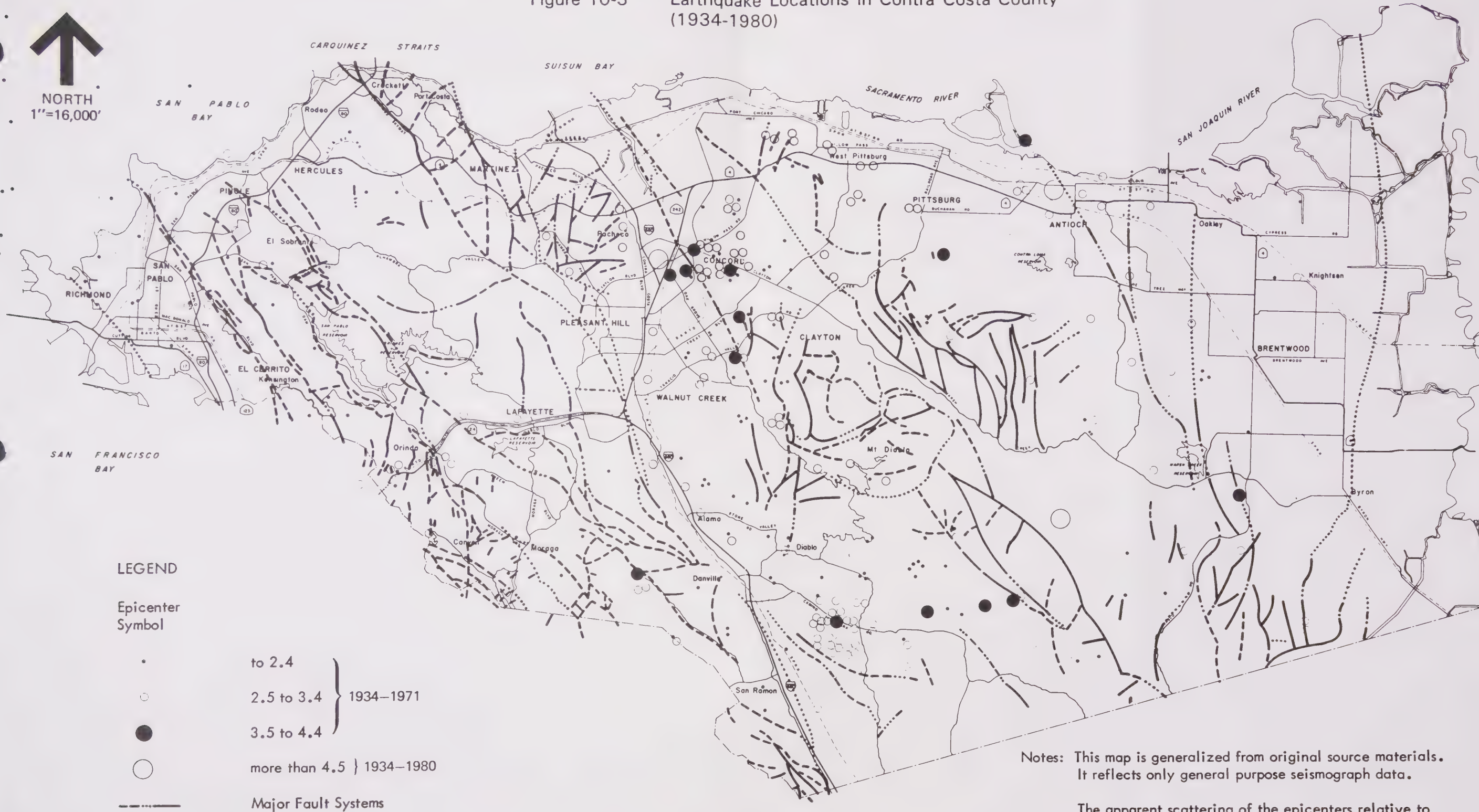
<sup>6</sup>Woodward-Clyde Consultants (1984)

<sup>7</sup>Shedlock and Others (1980)

Notes:

- (1) The maximum credible earthquake is the maximum earthquake that appears capable of occurring under the presently known tectonic framework. It is a rational and believable event that is in accord with all known geologic and seismic facts. In determining the maximum credible earthquake, little regard is given to its probability of occurrence, except that its likelihood of occurring is great enough to be of concern. It is conceivable that the maximum credible earthquake might be approached more frequently in one geologic environment than in another. (California Division of Mines and Geology (CDMG) Note 43, 1975)
  - (2) The maximum probable earthquake is the maximum earthquake that is likely to occur during a 100-year interval. It is to be regarded as a probable occurrence, not as an assured event that will occur at a specific time. (CDMG Note 43, 1975).
-

Figure 10-3 Earthquake Locations in Contra Costa County (1934-1980)



Notes: This map is generalized from original source materials. It reflects only general purpose seismograph data.

The apparent scattering of the epicenters relative to fault locations is due to instrumentation and measurement problems as well as the dip of the faults and other factors.

Compiled by the Contra Costa County Community Development Department from the University of California (Berkeley) Seismograph Station Records.





### Projected Probability of Seismic Hazard Occurrences

Using the available data and information, an earthquake probability estimate has been developed for Contra Costa County and is shown in Table 10-4. Table 10-4 evaluates the likelihood that earthquakes capable of producing damage in Contra Costa County will occur on certain faults during a 50-year period. (Fifty years is a rough average nominal life of a structure.) The forecast shows that a structure built in Contra Costa County is likely to be subjected to a severely damaging earthquake during its useful life. Such an earthquake could originate in several locations.

Since a structure built in the region probably will be subjected to a damaging earthquake during its useful life, it is reasonable that it be designed to survive the event, or to at least protect its occupants and functions. To do this, architects and engineers need to have information on earthquake characteristics, such as earthquake accelerations and duration of strong ground shaking. These characteristics have been estimated for selected faults in Table 10-5. The data in the table may be used as an approximation of parameters prevailing over a large area and as a beginning point for determining the parameters affecting a particular location.

The tabulated earthquake characteristics in Table 10-5 are for "bedrock" for seismic response purposes, and may differ in the near-surface materials. Solid ground or rock tends to dampen ground motion while poorly consolidated and water-saturated materials amplify ground motion. These data should be used only by qualified personnel in project background evaluations, and by engineers and architects in their development of structural design criteria.

The ways different areas of the County would react to ground shaking have been mapped using approximation methods (described in a technical background report which is an appendix to this document). Figure 10-4 illustrates the estimated seismic susceptibility to damage based upon this mapping.

Areas situated on hard bedrock (e.g. the Briones Hills, Las Trampas Ridge, Diablo Range) may be expected to perform satisfactorily under earthquake conditions, provided that ground materials near the surface do not fail. Areas underlain by weakly consolidated sedimentary rocks (e.g. Pinole Ridge, the Tassajara Area, Alamo) are considered to possess a moderately low to moderate damage susceptibility.

**TABLE 10-4**  
**APPROXIMATE PROBABILITY OF OCCURRENCE OF**  
**EARTHQUAKES ON SELECTED BAY AREA FAULTS**  
**(50-YEAR PERIOD)**

| <u>Causative Fault</u> | <u>Magnitude</u> | <u>Approximate Probability of Occurrence (over a 50-year period)</u> |
|------------------------|------------------|--|
| San Andreas            | 7.0 - 8.0        | Likely   |
|                        | 8.0 - 8.5        | Intermediate   |
| Hayward                | 6.0 - 7.0        | Likely   |
|                        | 7.0 - 7.5        | Intermediate   |
| Calaveras              | 6.0 - 7.0        | Intermediate   |
|                        | 7.0 - 7.5        | Intermediate - Low   |
| Concord                | 5.0 - 6.0        | Likely   |
|                        | 6.0 - 7.0        | Intermediate - Low   |
| Antioch                | 5.0 - 6.0        | Likely   |
|                        | 6.0 - 7.0        | Intermediate - Low   |

Definition of Terms:

**Likely:** Greater than a 50% probability of occurrence.

**Intermediate:** A 15-50% probability of occurrence.

**Low:** Less than a 15% probability of occurrence.

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**Source:** Contra Costa County Community Development Department estimates

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TABLE 10-5  
ESTIMATED MAXIMUM PARAMETERS FOR KNOWN FAULTS  
AFFECTING CONTRA COSTA COUNTY  
(BASED ON TABLE 10-3)

| Fault  | San Andreas | Hayward    | Calaveras  | Concord    | Clayton/<br>Greenville | Antioch    |
|--|-------------|------------|------------|------------|------------------------|------------|
| Magnitude <sup>1</sup>                             | 8.25 - 8.5  | 6.5 - 7.25 | 6.5 - 7.25 | 5.75 - 6.5 | 5.75 - 6.5             | 5.75 - 6.5 |
| Duration of Strong Shaking <sup>2</sup> (Seconds)  | 25 - 37     | 18 - 30    | 18 - 30    | 7 - 22     | 7 - 22                 | 7 - 22     |
| Maximum Intensity (M.M.) <sup>3</sup>              | IX - XI     | VIII - IX  | VIII - IX  | VII - VIII | VII - VIII             | VII - VIII |
| Peak Horizontal Accelerations on Rock <sup>4</sup> |             |            |            |            |                        |            |
| <u>Distance from Fault in Miles</u>                |             |            |            |            |                        |            |
| 5  | .50 - .55   | .25 - .50  | .25 - .50  | .20 - .45  | .20 - .45              | .20 - .45  |
| 10   | .45 - .50   | .15 - .40  | .15 - .40  | .15 - .30  | .15 - .30              | .15 - .30  |
| 20   | .25 - .30   | .10 - .25  | .10 - .25  | .05 - .15  | .05 - .15              | .05 - .15  |
| 30   | .20 - .25   | .05 - .20  | .05 - .20  | .05 - .10  | .05 - .10              | .05 - .10  |
| 40   | .15 - .20   | .05 - .10  | .05 - .10  | < .05      | < .05                  | < .05      |
| 50   | .10 - .15   | < .10      | < .10      | < .05      | < .05                  | < .05      |

Notes:

<sup>1</sup> Magnitude Estimates from Table 10-3. The first listed magnitude for each fault is the maximum probable earthquake; the second is the maximum credible earthquake. The maximum probable earthquake for the San Andreas Fault is the historic 1906 earthquake.

<sup>2</sup> Bracketed duration for ground motions are 0.5g within 10 miles of the fault. Estimates based on relationships developed by Bolt (1973).

<sup>3</sup> Estimate based on relationships developed by Richter (1958). Modified Mercalli scale is included in Appendix M.

<sup>4</sup> Estimates based on relationships developed by Seed and Idriss (1972), Joyner and Boore (1981), Campbell (1981) and Sadigh (1983).

The characteristics of ground motion in alluvial areas will differ somewhat from nearby bedrock areas (e.g., higher amplitudes, longer period, somewhat higher accelerations, etc.), and these differences may be important in the design of sophisticated structures. Areas underlain by firm, dry alluvium are considered to possess a moderate damage susceptibility.

Areas underlain by young bay mud and deposits of the Sacramento-San Joaquin delta are considered to possess the highest damage susceptibility. Most of the County's development and population are located in areas of moderate to moderately low damage susceptibility.

Liquefaction is a specialized form of ground failure caused by earthquake ground motion. It is a "quicksand" condition occurring in water-saturated, unconsolidated, relatively clay-free sands and silts caused by hydraulic pressure (from ground motion) forcing apart soil particles and forcing them into quicksand-like liquid suspension. In the process, normally firm, but wet, ground materials take on the characteristics of liquids.

Catastrophic ground failures may result from liquefaction that pose a major threat to the safety of engineered structures. Major landslides, settling and tilting of buildings on level ground, and failure of water retaining structures have all been observed as a result of this type of ground failure. It should be emphasized that great earthquakes anywhere in the Bay Area are capable of triggering liquefaction in Contra Costa County.

Historically, ground failure in its various forms, including liquefaction, has been a problem in areas of continually wet, unconsolidated geologic units. In Contra Costa County, the areas which are most susceptible to ground failure include the geologically young sediments of the San Francisco Bay estuary, including the Delta lowlands.

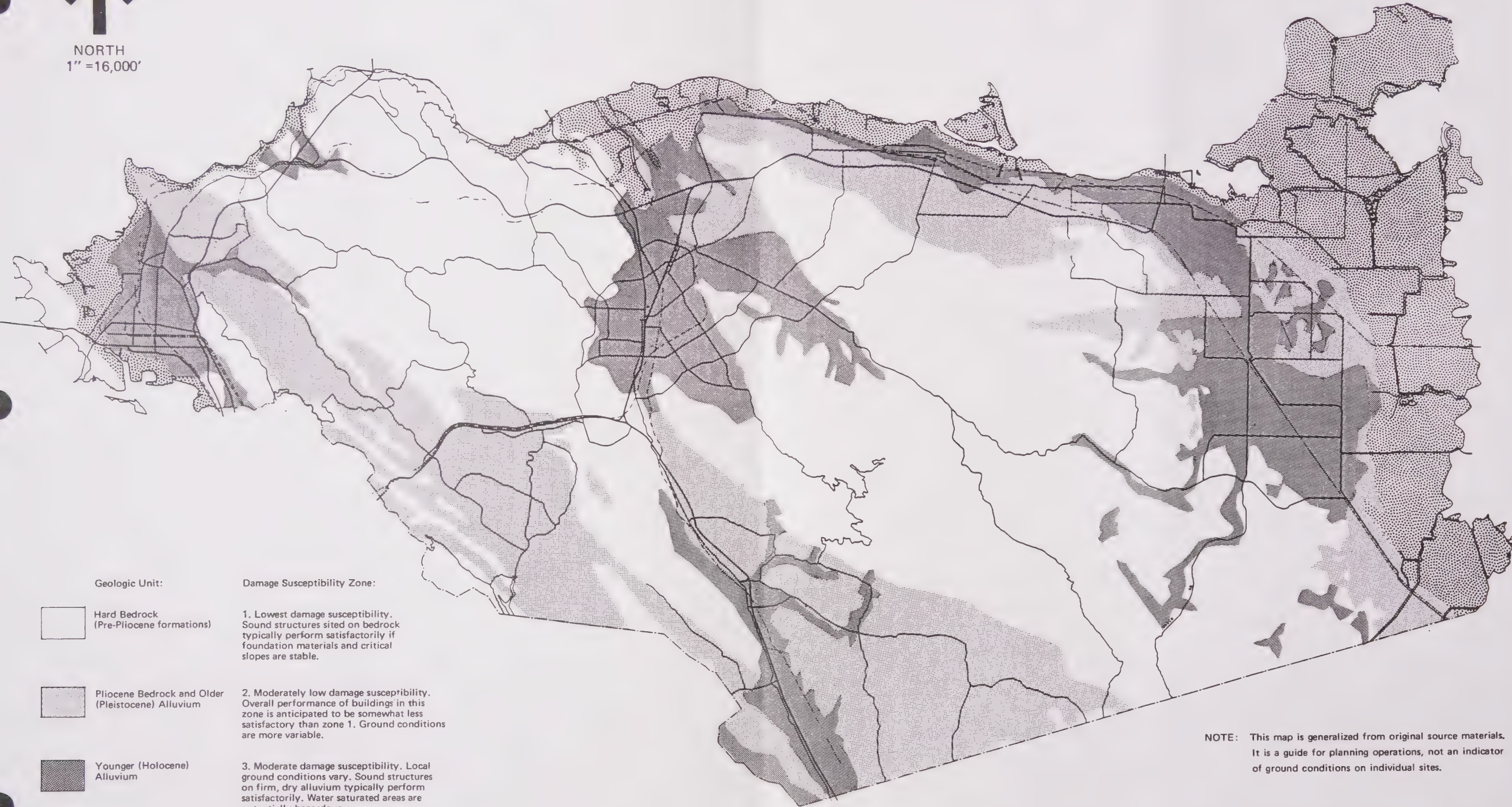
Within the area of continually wet, unconsolidated deposits (Zone IV on Figure 10-4), the degree of seismic risk is closely related to local ground conditions. A site underlain by a great thickness of potentially unstable material (soft, compressive mud and loose, clay-free sands, etc.) is extremely hazardous. It should be recognized that such a site has a very limited development potential. Conversely, a site underlain by a minimum thickness of soft mud possesses a much better development potential. Utilizing existing knowledge of foundation engineering, such a site could be made suitable for a variety of land uses.



Figure 10-4 Estimated Seismic Ground Response



NORTH  
1" = 16,000'



Geologic Unit:

Hard Bedrock  
(Pre-Pliocene formations)

Pliocene Bedrock and Older  
(Pleistocene) Alluvium

Younger (Holocene)  
Alluvium

Modern sediments of San  
Francisco Bay Estuary  
and Delta lowlands.

Damage Susceptibility Zone:

1. Lowest damage susceptibility.  
Sound structures sited on bedrock  
typically perform satisfactorily if  
foundation materials and critical  
slopes are stable.

2. Moderately low damage susceptibility.  
Overall performance of buildings in this  
zone is anticipated to be somewhat less  
satisfactory than zone 1. Ground conditions  
are more variable.

3. Moderate damage susceptibility. Local  
ground conditions vary. Sound structures  
on firm, dry alluvium typically perform  
satisfactorily. Water saturated areas are  
potentially hazardous.

4. Highest damage susceptibility.  
These weak, water saturated deposits  
possess many adverse engineering  
characteristics. Earthquake stability poor.

NOTE: This map is generalized from original source materials.  
It is a guide for planning operations, not an indicator  
of ground conditions on individual sites.

Source: Geologic unit information compiled from U.S.  
Geological Survey and California Division of Mines  
and Geology mapping. Earthquake response interpretation  
by the Contra Costa Community Development Department





Liquefaction presents the potential for the most serious consequences in the Delta. Several pre-development studies have confirmed that a high potential for liquefaction exists below levees and proposed developments. This potential presents the possibility that several failures can occur simultaneously on a single levee, possibly preventing access for repairs. Flooding of protected islands would then be unpreventable and would make emergency relief and later repair very difficult. (A further discussion of flooding and liquefaction in the Delta area is included in the "Flood Hazards" section below.)

Figure 10-5 shows the estimated liquefaction potential for the County, based on geologic conditions (summarized in Figure 10-1), and a review of soils data from a number of sources. Areas underlain by hard bedrock are not subject to liquefaction, so these can be eliminated from consideration when large areas are being evaluated on a generalized basis. In Contra Costa County, such areas comprise about half of the land area, but almost all of that has hilly topography. Areas with deep water tables and those underlain by well consolidated ground materials typically have low or moderate liquefaction potentials. The cities of western, central and northern Contra Costa County fall into these categories.

Geologically young and water-saturated sandy sediments, such as those found in the extensive shoreline areas in western and northeastern county locations and the delta, are highly susceptible to liquefaction. Soil engineering studies for subdivision and other major land development projects should make a careful appraisal of the liquefaction potential and the possible consequences of such liquefaction.

## SEISMIC HAZARD ISSUES

In areas of substantial risk, geologic conditions should be a primary determinant of land use. Generally, urban or suburban uses or intensities should not be planned for areas where geologic conditions would result in unacceptable risks to life and safety, and areas where the public costs of overcoming geologic deficiencies would exceed public benefits. It should be recognized, however, that much can be done to mitigate potentially hazardous conditions. Project approvals in areas of substantial risk should be based on knowledge of local ground conditions and appropriate mitigation. Because it is impractical for government to prepare detailed geologic information on a countywide basis, it is preferable to deal with geologic conditions through project review.

Senate Bill 547 (1986) requires that jurisdictions prepare an inventory of unreinforced masonry structures and adopt local ordinances to improve or replace this type of structure. Unreinforced masonry structures are generally believed to be prone to collapse in an earthquake with resultant high risk of deaths and injuries.

Certain public and institutional services are needed immediately following an earthquake to aid the injured, prevent additional casualties, and protect property. It is imperative that these critical and emergency service facilities survive an earthquake and remain operative. Other public facilities such as emergency shelters and gathering areas for separated family members are also important facilities that should be designed to survive any earthquake.

Underground components of utility systems are often extensively damaged during significant earthquakes. Pipelines for domestic and fire fighting water, sewer service, gas, and for electrical services and communications can be shattered. Above-ground transmission and distribution systems are also susceptible to earthquake damage, but they are usually easier and less expensive to restore than the underground installations. In addition, utility plants and stations are subject to earthquake damage.

Transportation facilities, especially the bridges, roads and streets of the arterial network, are "critical" or "essential" facilities for responding to the effects of a substantial earthquake because they are necessary for the movement of emergency vehicles, supplies, and evacuation transport. Later, they are necessary to accomplish reconstruction and restoration of the local economy. For example, airports enable damage-assessment reconnaissance flights immediately after a disaster, and accommodate the evacuation of casualties and supplies afterwards. The full range of transportation facilities, including railroads, ports, and public transportation systems, have roles to play in the recovery process.

Transportation systems are vulnerable to earthquakes. Road and streets are easily blocked, and are often buckled and broken, but emergency routes can be readily improvised. The interchanges of freeways and similar installations (bridges and overpasses, for example) are often damaged but not readily restored. A major earthquake impacting Contra Costa County would be expected to cause widespread damage to its transportation systems. The linear elements of these systems—roads, railroad tracks, and BART tracks—necessarily cross various earthquake faults as well as areas susceptible to ground failure. Landsliding from non-earthquake causes is a recurring problem that would be intensified by ground shaking.

Critical industrial facilities are of special concern because of potential hazardous materials spillage or critical industrial processes disruption. For critical industrial facilities, seismic safety considerations must include the location of plants and storage areas, and the design and construction of industrial structures. As a result of compliance with out-of-date building codes, some existing installations need to be evaluated in light of current knowledge.





NORTH  
1"=16,000'

Figure 10-5 Estimated Liquefaction Potential







### Opportunities and Constraints

Table 10-6 details the acceptable risks from seismic events relative to various types of structures by use and occupancy. This scale was developed by the California Legislature's Joint Committee on Earthquake Planning and has been adopted in most California building codes and by most California planning agencies.

Following the experience of the San Fernando Earthquake of 1971, building code provisions have strengthened many structural design criteria. However, a major deficiency in the code is the lack of strict criteria governing attachment of non-structural elements which present a danger to persons if they are dislodged during an earthquake.

The major technical impediment to the development of programs to correct hazardous structural conditions or "dangerous buildings" is the lack of a comprehensive and systematic inventory. Conventional sources of generalized structural information, such as the Federal Census of Housing and Land Use inventories for the general plan, are not adequate to make even large-area policy planning assessments of where problem structures are located, what their problems are, and how many structures are involved. Similarly, normal sources of information on individual structures are inadequate to provide the kinds of information needed for implementation and enforcement programs. In both cases, special inventories and specialized reviews of existing data sources are necessary to prepare seismic safety programs dealing with structures.

The Post-Earthquake Recovery and Redevelopment Advisory Group to the Legislature's Joint Committee on Seismic Safety has made a series of recommendations which suggest control mechanisms that can be instituted prior to an earthquake, and which will go into effect automatically in the post-earthquake period to provide a framework for reconstruction and redevelopment. The objectives of these recommendations are to minimize recovery problems and maximize the degree of seismic safety afforded to future generations inhabiting the affected area.

### Evaluation Of Existing Plans, Policies and Regulations

This advisory group has recommended that counties and cities provide for post-disaster conditions in the General Plans. First, jurisdictions need to ensure that proper consideration be given to changes in land use in areas that are heavily damaged by future earthquakes. The planning staff should develop contingency procedures for immediate updating of the General Plan for areas that are heavily damaged by a severe



**TABLE 10-6**  
**A SCALE OF ACCEPTABLE RISKS**

| <u>Level of Acceptable Risk</u>   | <u>Kinds of Structures</u>  | <u>Extra Project Cost Probably Required to Reduce Risk to an Acceptable Level</u>                                   |
|---|---|---|
| 1. Extremely low <sup>1</sup>   | Structures whose continued functioning is critical, or whose failure might be catastrophic: nuclear reactors, large dams, power intertie systems, plants manufacturing or storing explosives or toxic materials.  | No set percentage (whatever is required for maximum attainable safety).   |
| 2. Slightly higher than under level 1                                     | Structures whose use is critically needed after a disaster: important utility centers: hospitals, fire police, emergency communication facilities; fire stations, and critical transportation elements such as bridges and overpasses; also smaller dams.   | 5 to 25 percent of project cost <sup>2</sup>  |
| 3. Lowest possible risk to occupants of the structure <sup>3</sup>        | Structures of high occupancy, or whose use after a disaster would be particularly convenient: schools, churches, theaters, large hotels, and other high-rise buildings housing large numbers of people, other places normally attracting large concentrations of people, civic buildings such as fire stations, secondary utility structures, extremely large commercial enterprises, most roads, alternative or non-critical bridges and overpasses. | 5 to 15 percent of project cost <sup>4</sup>  |
| 4. An "ordinary" level of risk to occupants of the structure <sup>3</sup> | The vast majority of structures: most commercial and industrial buildings, small hotels and apartment buildings, and single-family residences.  | 1 to 2 percent of project cost, in most cases (2 to 10 percent of project cost in a minority of cases) <sup>4</sup> |

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- <sup>1</sup> Failure of a single structure may affect substantial populations.
- <sup>2</sup> These additional percentages are based on the assumption that the base cost is the total cost of the building or other facility when ready for occupancy. In addition, it is assumed that the structure would have been designed and built in accordance with current California practice. Moreover, the estimated additional cost presumes that structures in this acceptable-risk category are to embody sufficient safety to remain functional following an earthquake.
- <sup>3</sup> Failure of a single structure would affect primarily only the occupants.
- <sup>4</sup> These additional percentages are based on the assumption that the base cost is the total cost of the building or facility when ready for occupancy. In addition, it is assumed that the structures would have been designed and built in accordance with current California practice. Moreover, the estimated additional cost presumes that structures in the acceptable-risk category are to be sufficiently safe to give reasonable assurance of preventing injury or loss of life during any earthquake, but otherwise not necessarily to remain functional.
- <sup>5</sup> "Ordinary risk": Resist minor earthquakes without damage, resist moderate earthquakes without structural damage, but with some non-structural damage; resist major earthquakes of the intensity or severity of the strongest experienced in California, without collapse, but with some structural as well as non-structural damage. In most structures, it is expected that structural damage, even in a major earthquake, could be limited to repairable damage. (Structural Engineers Association of California).

Source: Meeting the Earthquake Challenge, Part 1, p. 9.

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earthquake. Additionally, it is suggested that contingency redevelopment be considered in preparing or updating area plans.

The most expeditious results from this program can be gained through the process of public reviews for both public and private projects because they rely to a substantial extent on the project sponsor to respond to the findings of studies prepared for the project. The basic recommendation is that the Safety Element be utilized to its fullest in performing project reviews. It is intended to guide public and private planning for development and public works, emergency operations, post-disaster recovery assistance, and redevelopment. The policies are suggested for consideration by all public, private, and utility agencies in the County which impact on, or can improve the state of public safety, guide public and private planning for development and for public works, emergency operations, post-disaster recovery assistance, and redevelopment. The policies are suggested for consideration by all public, private, and utility agencies in the County which impact on, or can improve, public safety.

The purpose of the preceding discussion has been to make observations and preliminary estimates of the prevalence, location and degree of hazard posed by certain types of existing structures and facilities. Furthermore, it is intended to indicate the scope, direction and magnitude of the subsequent review of individual facilities. It is apparent that the highest priority should be given to (a) critical structures (including industrial facilities and high occupation buildings) that are sited in hazardous fault zones, in areas subject to seismically-triggered flooding, and in marshland areas; (b) building types that are known to be hazardous; (c) older structures which have not had the benefit of seismic design provisions.

## SEISMIC HAZARD GOALS

- 10-A. To protect human life and reduce the potential for serious injuries from earthquakes; and to reduce the risks of property losses from seismic disturbances which could have severe economic and social consequences for the County as a whole.
- 10-B. To reduce to a practical minimum injuries and health risks resulting from the effects of earthquake ground shaking on structures, facilities and utilities.
- 10-C. To protect persons and property from the life-threatening, structurally and financially disastrous effects of ground rupture and fault creep on active faults, and to reduce structural distress caused by soil and rock weakness due to geologic faults.
- 10-D. To reduce to a practical minimum the potential for life loss, injury, and economic loss due to liquefaction-induced ground failure, levee failure, large lateral land movements toward bodies of water, and consequent flooding; and to mitigate the lesser consequences of liquefaction.



## SEISMIC HAZARD POLICIES

- 10-1. Contra Costa County, as part of an area with high seismicity, shall recognize that a severe earthquake hazard exists and shall reflect this recognition in its development review and other programs.
- 10-2. Significant land use decisions (General Plan amendment, rezoning, etc.) shall be based on a thorough evaluation of geologic-seismic and soils conditions and risk.
- 10-3. Because the region is seismically active, structures for human occupancy shall be designed to perform satisfactorily under earthquake conditions (see Table 10-6).
- 10-4. In areas prone to severe levels of damage from ground shaking (i.e., Zone IV on Map 10-4), where the risks to life and investments are sufficiently high, geologic-seismic and soils studies shall be required as a precondition for authorizing public or private construction.
- 10-5. Staff review of applications for development permits and other entitlements, and review of applications to other agencies which are referred to the County, shall include appropriate recommendations for seismic strengthening and detailing to meet the latest adopted seismic design criteria.
- 10-6. Structures for human occupancy, and structures and facilities whose loss would substantially affect the public safety or the provision of needed services, shall not be erected in areas where there is a high risk of severe damage in the event of an earthquake.
- 10-7. The County should encourage cooperation between neighboring government agencies and public and private organizations to give appropriate attention to seismic hazards to increase the effectiveness of singular and mutual efforts to increase seismic safety.

### Groundshaking Policies

- 10-8. Ground conditions shall be a primary consideration in the selection of land use and in the design of development projects.
- 10-9. In areas susceptible to high damage from ground shaking (i.e., Zone IV on Map 10-4), geologic-seismic and soils studies shall be required prior to the authorization of major land developments and significant structures (public or private).
- 10-10. Policies regarding liquefaction shall apply to other ground failures which might result from groundshaking but which are not subject to such well-defined field and laboratory analysis.

### Faults and Fault Displacement Policies

- 10-11. Classify as active those faults which have ruptured the ground surface during Holocene geologic time, roughly the last 10,000 years. Classify as potentially active faults which displace Quaternary geologic units, those formed during approximately the last 2 to 3 million years.
- 10-12. Prohibit construction of structures for human occupancy, and structures whose loss would affect the public safety or the provision of needed services, over the trace of an active fault.

- 10-13. In areas where active or inactive earthquake faults have been identified, the location and/or design of any proposed buildings, facilities, or other development shall be modified to mitigate possible danger from fault rupture or creep.
- 10-14. Preparation of a geologic report shall be required as a prerequisite before authorization of public capital expenditures or private development projects in areas of known or suspected faulting.
- 10-15. To the extent practicable, the construction of structures requiring a high degree of safety and other critical structures shall not be allowed in an active or potentially active fault zone.
- 10-16. When such a critical structure must be located in a fault zone, the structure shall be carefully sited, designed and constructed to withstand the anticipated earthquake stresses.
- 10-17. Locate roads, particularly those which carry important utilities or large volumes of traffic, over active faults only where other alternatives are impractical.

#### Liquefaction Policies

- 10-18. This General Plan shall discourage urban or suburban development in areas susceptible to high liquefaction dangers and where appropriate subject to the policies in 10-20 below, unless satisfactory mitigation measures can be provided, while recognizing that there are low intensity uses such as water-related recreation and agricultural uses that are appropriate in such areas. (For the Bethel Island Area, the adopted specific plan policies will apply.)
- 10-19. To the extent practicable, the construction of critical facilities, structures involving high occupancies, and public facilities shall not be sited in areas identified as having a high liquefaction potential, or in areas underlain by deposits classified as having a high liquefaction potential.
- 10-20. Any structures permitted in areas of high liquefaction danger shall be sited, designed and constructed to minimize the dangers from damage due to earthquake-induced liquefaction.
- 10-21. Approvals to allow the construction of public and private development projects in areas of high liquefaction potential shall be contingent on geologic and engineering studies which define and delineate potentially hazardous geologic and/or soils conditions, recommend means of mitigating these adverse conditions; and on proper implementation of the mitigation measures.

#### **SEISMIC HAZARD IMPLEMENTATION MEASURES**

- 10-a. Require that structures intended for human occupancy are adequately set back from active and potentially active fault traces. Ensure that minimum setbacks take into account the varying degrees of seismic risk and the consequences of failure.
- 10-b. Utilize the land in the setback zones along active and potentially active fault traces for open forms of land use that could experience displacement without endangering large numbers of people or creating secondary hazards. Examples are yards, greenbelts, parking lots, and non-critical storage areas.
- 10-c. Require comprehensive geologic and engineering studies for any critical structure, whether or not it is located within a Special Studies Zone.

- 10-d. Through the environmental review process, require geologic, seismic, and/or soils studies as necessary to evaluate proposed development in areas subject to groundshaking, fault displacement, or liquefaction.
- 10-e. Evaluate and, where necessary, upgrade water distribution, sewage disposal, gas and electricity, communications and other service facilities in areas subject to seismic hazards.
- 10-f. Evaluate and upgrade hospitals, bridges, major roads, and other essential structures to be able to withstand seismic hazard.
- 10-g. Establish a clearinghouse for vital service records and distribution system design plans.
- 10-h. In areas that could become isolated in the event of a major earthquake, ensure that adequate medical aid, water supply, waste disposal, and other public health and safety services are available.
- 10-i. Adopt ordinance code provisions related to the repair or replacement of unreinforced masonry structures.
- 10-j. Prepare an inventory of post-disaster public facilities to be used for emergency shelter and gathering places.
- 10-k. Authorize the Community Development Department to immediately begin updating the general plan in areas which are heavily damaged by a severe earthquake.
- 10-l. Develop ordinances incorporating existing Board of Supervisors' policy on administering the Alquist Priolo Special Studies Zone Act.

## 10.7 GROUND FAILURE AND LANDSLIDE HAZARDS

### INTRODUCTION

The major geologic hazards in Contra Costa County, aside from earthquake rupture and direct effects of ground shaking, are unstable hill slopes and reclaimed wetlands and marsh fill areas. Slopes may suffer landslides, slumping, soil slips, and rockslides. Reclaimed wetlands, whether filled or not, experience amplified lateral and vertical movements which can be damaging to structures, utilities, and transportation routes and facilities.

Landslides and other ground failures occur during earthquakes, triggered by the strain induced in soil and rock by the groundshaking vibrations, and during non-earthquake conditions, most frequently during the rainy season. Both natural and man-made factors contribute to these slope failures. Contra Costa County's damage costs after a large earthquake could be high in proportion to the State as a whole because of its large area of hilly terrain and high proportion of recent, poorly consolidated geologic formations which are prone to slope failure.



Ground failure occurs when stresses in the ground exceed the resistance of earth materials to deformation or rupture. This instability can be triggered by earthquake shaking, which instantaneously places high stresses on earth materials by loss of soil strength due to saturation or seismic shaking. Ground failure can also be triggered by man-made changes, such as loading a steep slope or unstable soils.

The manifestations of ground failure are complex and highly variable; they include numerous varieties of landslides, sloughing, liquefaction, ground cracking, lurching, lateral spreading, subsidence and differential settlement. Whether ground failure may occur, and the type of ground failure that may develop, depend on the topographic, geologic, and hydrologic characteristics of the ground, as well as the extent of ground shaking.

Important effects of ground failure in addition to direct life and structure loss and injuries, include loss of access for emergency services and repairs at important facilities which are accessed by traversing unstable ground, and the potential release of hazardous materials from containment facilities.

Landslides are perhaps the most common form of ground failure that is not caused by earthquakes. In areas where a severe slope stability problem exists, landslide damage can best be avoided by simply not building on the unstable ground. In some landslide-prone areas, landslides can be totally removed or stabilized. Through good planning and careful, controlled design, landslide losses can be all but eliminated.

Although landslides due to slope failure are most frequent in "wet years" with above-average rainfall, they can occur at any time. Landslides may also occur on slopes of 15 percent or less; however, the probability is greater on steeper slopes, with old landslide deposits being the most likely to experience failure.

Slope failures are not expected to produce a disaster affecting hundreds or thousands of persons in the County. Rather, there is a persistent risk of damage to public and private property including individual residences, roads, canals and reservoirs, and other facilities. On a county-wide basis, the two most important factors influencing the performance of slopes are the nature of the bedrock or surficial deposits and the slope angle. However, there are a number of other factors which have a profound effect on the stability of a particular hillside. For example, the presence or absence of deep-rooted vegetation; surface and subsurface drainage conditions; thickness and engineering characteristics of soils and underlying weathered, partially decomposed rock; orientation of bedding; or locally high rainfall can exert a controlling effect on the intensity of natural processes occurring on a particular hillside.

County General Plans historically have recognized that major slope areas in excess of 26 percent are "not readily developable" and "undevelopable," recognizing the cost and engineering difficulties of grading steep slopes as well as their inherent unsuitability. This development limit in general agrees with customary limits throughout the Bay Area, and varies only slightly from the 30 percent standard reference developed by the State Division of Mines and Geology as the maximum developable slope. This is a state-wide reference which does not reflect special conditions such as clayey soils prevalent in Contra Costa County.

Landslides and ground slippages are another form of ground failure which may be precipitated by significant ground motion produced by earthquakes. Areas that are subject to slides and slippages from other natural causes may be very hazardous under earthquake conditions. This is also to say that earthquake effects will be more extensive if a major earthquake occurs during the rainy season when ground conditions are favorable to landsliding and ground slippage.

Whether a landslide will or will not occur at any specific, presently stable slope usually cannot be predicted under "natural conditions" because of the range of natural conditions and changes which occur with time. However, land which has experienced landsliding in the past is believed to be generally more slide-prone, and also is more sensitive to man-induced changes, such as grading, watering, removing or changing the type of vegetation, and changing drainage patterns, among many possible factors.

Many old landslides reach a position of static stability that may be lost as a result of earthquake shaking. The nearer to "equilibrium" condition the land is during normal conditions, the more likely the equilibrium (stable condition) will be lost during earthquake shaking. It should be noted again, however, that equilibrium may prevail under natural conditions at some times, yet be reduced to marginal stability or instability with different, natural or changed, conditions. Slight changes in equilibrium may result in slow, barely recognizable, landslide movement, and/or movement which periodically occurs under unfavorable conditions. Some landslides can be "turned on and off" by allowing groundwater levels to rise or fall, or by changing the mass of material in a particularly sensitive part of the landslide.

#### Map of Slopes and Landslide Hazard Areas

Maps showing degree of slope, landslides, landslide deposits, and relative slope stability (or instability) have been produced by several State, regional, and federal agencies; several such maps cover parts of Contra Costa County, and others, cover areas as large as the entire nine-County Bay Area. These maps and studies are referenced in the bibliography.



Figure 10-6 shows the general locations where landslide deposits are prevalent, based on U.S. Geological Survey landslide maps. Figure 10-7 illustrates in a general fashion the areas of the County where the prevailing slopes are 26 percent or over. Neither of the maps is definitive on a site-specific basis, but they do present an overview of stability and slope conditions for large areas. They are not a substitute for site-specific engineering geology and soils investigations. Nevertheless, several of the maps, especially those that are based on field-checked aerial photograph study, are valuable tools for preliminary assessments of the intensity or type of more detailed future investigations required for site development.

#### GROUND FAILURE AND LANDSLIDE HAZARD GOALS

- 10-E. To minimize the risk of loss of life or injury due to landslides, both ordinary and seismically-induced.
- 10-F. To reduce economic losses and social disruption from landslides, both ordinary and seismically-induced.

#### GROUND FAILURE AND LANDSLIDE HAZARD POLICIES

- 10-22. Slope stability shall be a primary consideration in the ability of land to be developed or designated for urban uses.
- 10-23. Slope stability shall be given careful scrutiny in the design of developments and structures, and in the adoption of conditions of approval and required mitigation measures.
- 10-24. Proposed extensions of urban or suburban land uses into areas characterized by slopes over 15 percent and/or generally unstable land shall be evaluated with regard to the safety hazard prior to the issuance of any discretionary approvals. Development on open hillsides and significant ridgelines throughout the County shall be restricted, and hillsides with a grade of 26 percent or greater shall be protected through implementing zoning measures and other appropriate actions.
- 10-25. Subdivision of rural lands outside planned urban areas down to the allowed minimum parcel size shall be discouraged, if the parcels are within, or only accessible through, geologically unstable areas.
- 10-26. Approvals of public and private development projects in areas subject to slope failures shall be contingent on geologic and engineering studies which define and delineate potentially hazardous conditions and recommend adequate mitigation.
- 10-27. Soil and geological reports shall be subject to the review and approval of the County Planning Geologist.
- 10-28. Generally, residential density shall decrease as slope increases, especially above a 15 percent slope.
- 10-29. Significant hillsides with slopes over 26 percent or more shall be considered unsuitable for types of development which require extensive grading or other land disturbance.
- 10-30. Development shall be precluded in areas when landslides cannot be adequately repaired.



- 10-31. Subdivisions approved on hillsides which include individual lots to be resold at a later time shall be large enough to provide flexibility in finding a stable buildable site and driveway location.
- 10-32. The County shall not accept dedication of public roads in unstable hillside areas, or allow construction of private roads there which would require an excessive degree of maintenance and repair costs.

#### GROUND FAILURE AND LANDSLIDE HAZARD IMPLEMENTATION MEASURES

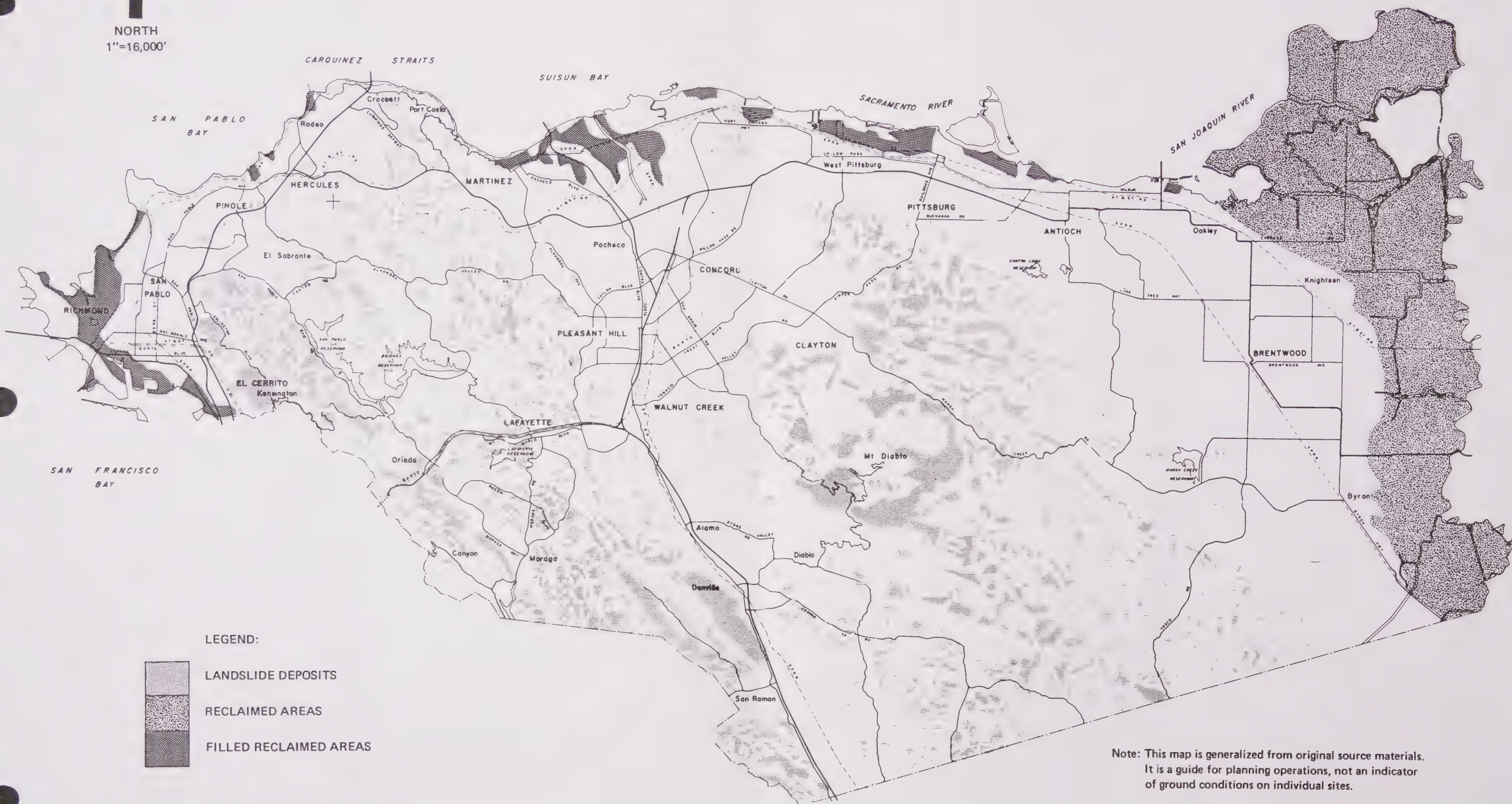
- 10-m. Prepare administrative maps at a scale of 1" = 2 miles for the County which indicate relative geologic (slope) stability, based upon the six categories recommended by the U.S. Geologic Survey.
- 10-n. Analyze the slope failure records of the Building Inspection Department and U.S. Geological Survey and recommend any needed improvements in the County's grading ordinance.
- 10-o. Consider adoption of a hillside preservation ordinance in order to implement the policies of the Safety Element and other elements of the General Plan.
- 10-p. Refer development proposals in areas of potential land instability or geologic hazards to a registered engineering geologist for review and recommendation.
- 10-q. Through the environmental review process, require geologic and engineering studies as necessary to evaluate proposed development in areas subject to potential landslide hazards.
- 10-r. General Plan amendment requests which involve parcels with slopes of over 15 percent shall be accompanied by a geological/soils report.





NORTH  
1"=16,000'

Figure 10-6 Geological (Landslide) Hazards

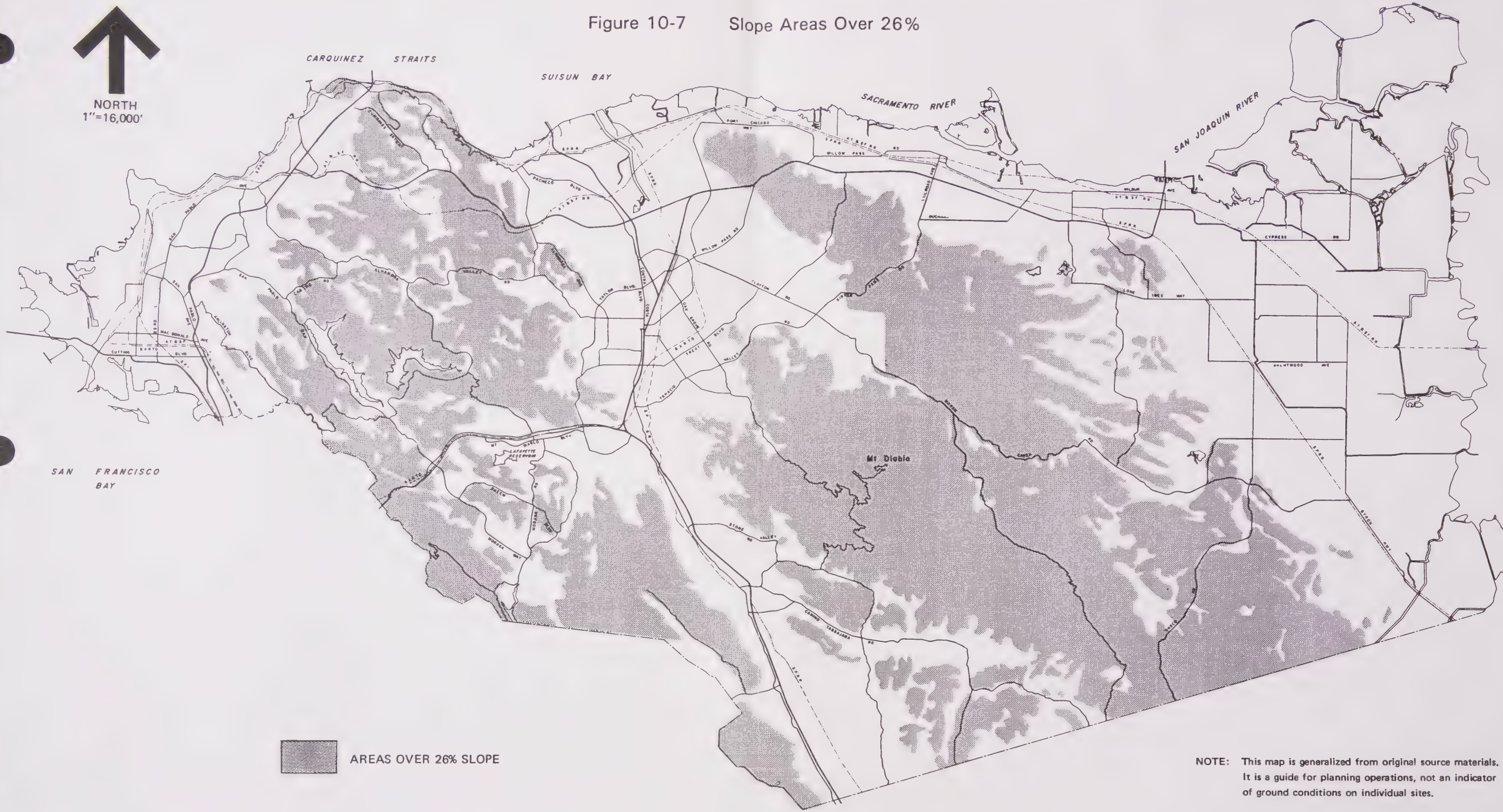


Source: U.S. Geological Survey and the Contra  
Costa County Community Development Department 1975





Figure 10-7 Slope Areas Over 26%



NOTE: This map is generalized from original source materials. It is a guide for planning operations, not an indicator of ground conditions on individual sites.

**CONTRA COSTA COUNTY  
CALIFORNIA**





## 10.8 FLOOD HAZARDS

### INTRODUCTION

Substantial areas within Contra Costa County are subject to flooding. According to records maintained by the Federal Emergency Management Agency (FEMA), the majority of the County's creeks and shoreline areas lie within the 100-year flood plain, i.e., an area subject to flooding in a storm that is likely to occur (according to averages based upon recorded measurements) once every 100 years. The FEMA records are maintained as a means of determining flood insurance rates through the National Flood Insurance Program.

In the West and Central County, these areas include portions of the shoreline in the vicinity of Richmond, Hercules, Rodeo, Crockett, Port Costa, and Martinez; most creeks in urbanized areas, including Concord, Walnut Creek, and the San Ramon Valley; and reservoirs and creeks located on undeveloped East Bay Regional Park District (EBRPD) and East Bay Municipal Utility District (EBMUD) lands. In the East County, substantial acreage lies within the 100-year flood plain, including Bethel Island, the Veale Tract, Holland Tract, Franks Tract, Jersey Island, and the area in the Byron vicinity. Portions of the Pittsburg, Antioch, and Brentwood areas, as well as a number of creeks in East County, are also subject to flooding.

The most serious flood hazard that exists in Contra Costa County relates to the system of levees that protect the islands and adjacent mainland in the San Joaquin-Sacramento River Delta area in eastern Contra Costa. Levees are basically long, continuous dams that keep water out of a lower area, such as the Delta islands, many of which are at an elevation just above or below sea level.

The islands in the California Delta were drained during the nineteenth century to create high quality agricultural land. Since then, the peat-laden soil of many of the islands has oxidized, resulting in a sinking of their island floors and consequently requiring the construction of higher and heavier levees. Levee failure occurs in some areas where levees rest on soft mud, silt, or peat.

The islands continue to flood. In general, the islands have been reclaimed after each flood. However, Franks Tract State Park, essentially a lake east of Bethel Island, and the Big Break area of water north of Oakley, are visible reminders that it is not always practical or economical to reclaim flooded lands. Flooding problems in the Delta area have also been exacerbated by boat movement (primarily recreational) on the waterways which causes waves that accelerate the natural process of levee erosion.

The threat of levee failure during periods of high water is constant. In the years 1973, 1980, 1982, 1983, and 1986, one or more Delta island levees failed or were overtopped, and some of these events were summer breaks that did not occur at times of high storm runoff. Some islands in the Delta have been flooded two or three times since 1980.

The possibility that flooding will occur on the islands in the Delta is greatly increased by two ongoing, natural processes, which compound the dangers that periodic high tides or strong winter storms may breach a portion of the existing levee system. The two natural processes which impact the integrity of the levee are rising sea levels, caused by the world-wide "greenhouse effect," and "subsidence."

The greenhouse effect is a phenomenon that is projected to cause a rise in sea level over the next century, thus creating potential flooding problems. Hydrologists estimate the rate of rise may increase from the present one-half foot per century to approximately two to eight feet. The anticipated rise is believed to be caused by warming of the global climate due to accumulation in the atmosphere of gases such as carbon dioxide, methane, and chlorofluorocarbons which result from fossil fuel burning and deforestation of tropical rain forests. Since many factors affect global climates, the rate of change over a relatively short time-period, even a century, is very difficult to establish. The U.S. Environmental Protection Agency suggests that a rate of four feet per century be assumed for planning purposes for the San Francisco Bay Area. It is important to note that the existing FEMA flood hazard maps do not include the greenhouse effect in their potential flooding analysis.

In Contra Costa County, subsidence is caused by the natural process of oxidation of island peat soils, resulting in a gradual sinking of the ground. As many of the islands in the Delta (along with their levees) sink in elevation, the levees that protect the island's agricultural and/or residential uses must be raised and reinforced by adding more earth fill to the top of the levees. Recent evidence indicates that many islands have experienced significant subsidence over the last several decades. For example, it is estimated that Webb Tract in Contra Costa County has subsided up to 17 feet, and Bacon Island adjacent to Contra Costa County has subsided approximately 14 feet. Most reclaimed portions of the Delta in the County have subsided at least 10 feet. Areas that have experienced a measurable amount of subsidence are illustrated in Figure 10-8, Flood Hazards Map included in a later section of this chapter. These areas are highly susceptible to flooding.

A number of causes for subsidence have been identified. The oxidation-decay and shrinkage of peat and other soils which are rich in organic matter and fine clay particles may be the largest contributor to the problem. However, the withdrawal of shallow ground water for surface drainage may also cause surface compaction and/or soil shrinkage, which results in a loss of elevation. There is also evidence that the pumping of

groundwater, oil, or gas supplies from underneath several of the islands may be contributing to the natural consolidation and subsidence. Natural "tectonic" subsidence may also be contributing to the problem.

There are great difficulties involved in estimating the amounts and rates of subsidence from island to island in the Delta, since subsidence changes the elevation of bench marks, the survey points from which elevations are determined. It is first necessary to establish elevation control from stable areas outside the Delta, which requires very long survey lines. Recent work is concentrating on the use of an unmanned space satellite as a "survey platform" from which to study changes in elevations.

The consequence of subsidence and the possibility of sea levels rising due to the greenhouse effect is the increased potential that levees will fail and tidewater and high river water will inundate farmed and populated areas in the Delta. The California Delta in Contra Costa and in the adjoining counties has historically been devoted to agriculture and its population has remained small. However, growing commercial recreation and residential uses, as evidenced by the success of year-round subdivisions such as Discovery Bay, are leading to increases in the permanent population of the area. It will become increasingly more important, but also more difficult, for the County to provide adequate flood protection to residents and businesses in the Delta area. New urban development should be allowed only if long term, year-round flood protection can be provided to the area.

Allowing more residential and commercial development on or near the islands of the Delta increases the disaster potential of subsidence and flooding when levees fail. Approving land uses in the Delta area that support significant new populations must be carefully measured in terms of the potential loss of lives and property that could occur in the event of a major flood. The economic consequences of certain development should also be studied.

Seismicity presents additional special problems in the Delta. Delta levees are, in places, underlain by sands that are susceptible to ground failures including liquefaction during an earthquake. Strong earthquake shaking can cause the entire levee foundation to lose strength, leading to levee failure. Many levees are themselves constructed of liquefiable sand.

According to a report prepared for the East Bay Municipal Utility District, whose aqueduct pipes cross the Delta, twelve separate faults are capable of causing ground motion sufficient to cause liquefaction, requiring accelerations on the order of 7 to 27 percent of gravity (0.07 to 0.27g), with shaking lasting from about 5 to 23 seconds. A 1985 study by a State Department of Water Resources geologist noted levee slips and cracks



from five recent earthquakes, some as distant as 150 miles away from Contra Costa County. A large nearby earthquake could cause a number of simultaneous levee failures, making repairs difficult because the levees are the only land access to many points following a levee break.

In addition to the flooding hazards associated with levee failure caused by an earthquake, fault ruptures or ground shaking during an earthquake can cause the collapse of dams, as well as seiche and tsunami ("tidal waves").

Dam safety is regulated by the State Department of Water Resources, Division of Safety of Dams. All large reservoirs in the County have been investigated and many have been strengthened. Further, the Office of Emergency Services has produced inundation maps and emergency plans covering various scenarios of dam failure in the County.

The safety of small dams, which are mostly used for stock watering and other agricultural activities, is largely a private concern, with present standards set by the County Grading Ordinance. Many small dams predate even this regulation. However, seismic activity is not considered a significant hazard to small dams.

Tsunamis are sea waves created by undersea fault movement. Traveling through the deep ocean, a tsunami wave is a broad, shallow, and fast moving wave. When it reaches the coastline, the wave form pushes upward from the ocean bottom and becomes a high swell of water that breaks and washes inland with great force. The waves may reach fifty feet in height on unprotected coasts, and one recorded tsunami (in Japan in 1896) killed nearly 30,000 people and destroyed over 10,000 homes. Several people were drowned in Crescent City, California, in 1964 by the tsunami generated by the "Good Friday" Alaska earthquake.

Historic records of the Bay Area used by one study indicate that 19 tsunamis were recorded in San Francisco Bay during the period of 1868-1968. The maximum wave height recorded at the Golden Gate Tide Gage was 7.4 feet, which may be regarded as a reasonable maximum for future events.

The available data indicate a systematic diminishment of wave height from the Golden Gate to about half that height on the shoreline near Richmond, and to nil at the head of the Carquinez Strait. Thus, the damage potential of a tsunami will tend to be greater in the Richmond area and show a general decrease toward the head of Carquinez Strait.

Flooding can also result from seiche, which is a long wave-length, large-scale wave action set up in a closed body of water such as a lake or reservoir. Seiche is known to occur during earthquakes, but is not well understood. No occurrences have been recorded in the Bay Area. Elongated and deep (relative to width) bodies of water seem most likely to be affected, and earthquake wave orientation may also play a role in seiche formation. Seiche can temporarily flood a shoreline in a manner similar to tsunami; however, its destructive capacity is not as great. Seiche may cause overtopping of impoundments such as dams, particularly when the impoundment is in a near-filled condition, releasing flow downstream.

### Maps of Flood Hazard Areas

Figure 10-8 depicts the general location of the FEMA flood hazard areas throughout Contra Costa County. Flood Hazard Areas are those areas which have statistical chance of flooding once in 100 years. This map is not intended to be used to locate parcel-specific sites in relation to Flood Hazard Areas, but to convey the general extent and location of such areas. The map also indicates areas of subsidence in the County, but does not presently include consideration of the greenhouse effect.

### FLOOD HAZARD GOALS

- 10-G. To ensure public safety by directing development away from areas which may pose a risk to life from flooding, and to mitigate flood risks to property.
- 10-H. To mitigate the risk of flooding and hazards to life, health, structures, transportation and utilities due to subsidence, especially in the San Joaquin-Sacramento Delta area.

### GENERAL POLICIES

- 10-33. The areas designated on Figure 10-8 shall be considered inappropriate for conventional urban development due to unmitigated flood hazards as defined by FEMA. Applications for development at urban or suburban densities in areas where there is a serious risk to life shall demonstrate appropriate solutions or be denied.
- 10-34. In mainland areas affected by creeks, development within the 100-year flood plain shall be limited until a flood management plan can be adopted, which may include regional and local facilities if needed. The riparian habitat shall be protected by providing a cross section of channel suitable to carry the 100-year flow. Flood management shall be accomplished within the guidelines contained in the Open Space/Conservation Element.
- 10-35. In mainland areas along the rivers and bays affected by water backing up into the watercourse, it shall be demonstrated prior to development that adequate protection exists either through levee protection or change of elevation.

- 10-36. On islands in East County, development shall not be allowed until a study is performed to resolve issues and determine appropriate locations for development. This study shall be a high priority for the County and should include the following:
- o a risk assessment of development in that area; and
  - o an analysis of flooding due to runoff and tides, settlement of shallow soils, deep subsidence, liquefaction, and adequacy of insurance programs.
- 10-37. A uniform set of flood damage prevention standards should be established by the cooperative efforts of all County, State, and federal agencies with responsibilities for flood control works and development in flood-prone areas in the County.
- 10-38. Flood-proofing of structures shall be required in any area subject to flooding; this shall occur both adjacent to watercourses as well as in the Delta or along the waterfront.
- 10-39. In developing areas which are subject to the provisions of the Flood Insurance Program, for which there is no reasonable expectation of flood control project participation by the Corps of Engineers and where a significant number of properties will be affected, the Flood Control District shall be permitted to construct 100-year flood protection works when so directed by the Board of Supervisors.
- 10-40. Planning Agency and Flood Control District review of any significant project proposed for areas in the County which are not presently in Flood Zones shall include an evaluation of the potential downstream flood damages which may result from the project.

#### FLOOD HAZARD POLICIES

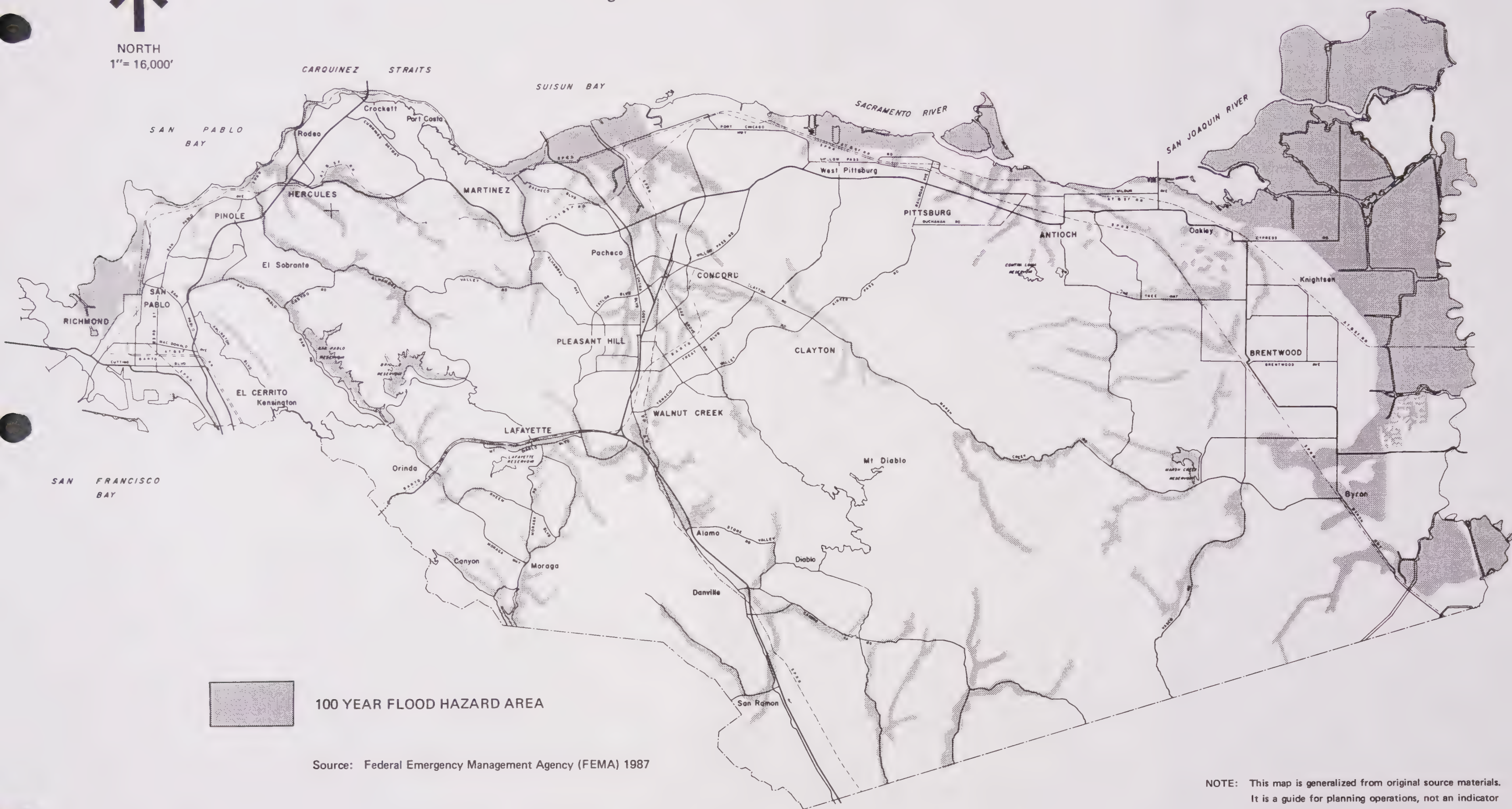
- 10-41. Buildings in urban development near the shoreline and in flood-prone areas shall be protected from flood dangers, including consideration of rising sea levels caused by the greenhouse effect.
- 10-42. Habitable areas of structures near the shore line and in flood-prone areas shall be sited above the highest water level expected during the life of the project, or shall be protected for the expected life of the project by levees of an adequate design.
- 10-43. Rights-of-way for levees protecting inland areas from tidal flooding shall be sufficiently wide on the upland side to allow for future levee widening to support additional levee height.
- 10-44. The County shall review flooding policies in the General Plan on an annual basis, in order to incorporate any new scientific findings regarding project sea level rise due to the greenhouse effect.
- 10-45. The County shall review flooding policies as they relate to properties designated by FEMA as within both the 100- and the 500-year floodplains.





NORTH  
1"= 16,000'

Figure 10-8 Flood Hazard Areas



NOTE: This map is generalized from original source materials. It is a guide for planning operations, not an indicator of ground conditions on individual sites.



Policies Regarding Subsidence

- 10-46. Whenever studies indicate subsidence is or may become a flood-threatening problem, the County should continue to monitor subsidence until flood protection is assured.
- 10-47. In accordance with the following policies, the General Plan shall not permit a substantial non-agricultural, residential population to be subjected to increased flood hazard due to subsidence.
- 10-48. Low density development of lands subject to subsidence shall take into account and fully mitigate the potential impacts of flooding based on the best currently available techniques.
- 10-49. Any development approvals for areas subject to subsidence shall include conditions which account for the need to support Delta reclamation and irrigation districts, and to strengthen weak and low levees prior to development.
- 10-50. The pumping of substantial quantities of water, oil, and gas in an area protected by levees is inconsistent with new major development approvals.

Policies Regarding Flooding Due to Levee or Dam Failure, or Tsunami

- 10-51. In order to protect lives and property, intensive urban and suburban development shall not be permitted in reclaimed areas unless flood protection in such areas is constructed, at a minimum, to the standards of the Flood Disaster Protection Act of 1973. Levees protecting these areas shall meet the standards of the U.S. Army Corps of Engineers.
- 10-52. Delta levees shall be rehabilitated and maintained to protect beneficial uses of the Delta and its water. Only those uses appropriate in areas subject to risk of flooding and seismic activity, such as agriculture and recreation, should be planned and approved. This policy shall not apply to Bethel Island or Discovery Bay.
- 10-53. Development of levee rehabilitation plans should consider methods to foster riparian habitat to the fullest extent possible consistent with levee integrity.
- 10-54. Agencies whose projects benefit from Delta levee protection, including the State and federal government (water, highway, fish and wildlife, and recreational projects), PG&E, and private railroad companies, shall participate in funding Delta levee improvements and maintenance.
- 10-55. The potential effects of dam or levee failure are so substantial that geologic and engineering investigation shall be warranted as a prerequisite for authorizing public and private construction of either public facilities or private development in affected areas.
- 10-56. Development proposals should be reviewed with reference to dam failure inundation maps, as these become available, in order to determine evacuation routes.
- 10-57. Dam and levee failure, as well as potential inundation from tsunamis and seiche, shall be a significant consideration of the appropriateness of land use proposals.
- 10-58. Dams and levees should be designed to withstand the forces of anticipated (design) earthquakes at their locations.



- 10-59. Important dams and coastal levees shall be regarded as critical facilities that should not be sited over the trace of an active or potentially active fault.
- 10-60. Structures for human occupancy, and particularly critical structures, and potentially dangerous commercial or industrial facilities (e.g., plants for the manufacture or storage of hazardous materials) shall be protected against tsunami hazard.

## FLOOD HAZARD IMPLEMENTATION MEASURES

- 10-s. Revise the creek setback ordinance for residential and commercial structures in order to prevent property damages from bank failure along natural water courses.
- 10-t. Encourage the County Flood Control District to proceed with drainage improvements in areas subject to flooding from inadequate facilities, and to ensure that additional new drainage facilities, including road culverts and bridges, are designed to pass the flow specified by County Ordinance Code.
- 10-u. Develop Flood Control Zone plans based on the concepts found in this General Plan. As adopted zone plans are revised, they should be brought into conformity with these concepts.
- 10-v. Draft and adopt a flood management plan for mainland areas affected by creeks, in accordance with the guidelines contained in the Safety Element and Open Space/Conservation Element of this General Plan.
- 10-w. Conduct a study of flooding conditions on islands in East County, including a risk assessment of development in that area and an analysis of flooding due to runoff and tides, settlement of shallow soils, deep subsidence, liquefaction, and adequacy of insurance programs.
- 10-x. Establish a uniform set of flood damage prevention standards in cooperation with appropriate County, State, and federal agencies.
- 10-y. Through the environmental review process, ensure that potential flooding impacts, due to new development, including on-site and downstream flood damage, subsidence, dam or levee failure, and potential inundation from tsunamis and seiche, are adequately assessed. Impose appropriate mitigation measures (e.g. flood-proofing, levee protection, Delta reclamations).
- 10-z. Develop and implement Delta levee rehabilitation plans in cooperation with State and federal agencies and the private sector, in accordance with the policies of this General Plan.
- 10-aa. Adopt ordinances implementing the FEMA Flood Insurance Program.
- 10-ab. Prohibit new structures which would restrict maintenance or future efforts to increase the height of the levees from being constructed on top or immediately adjacent to the levees.
- 10-ac. All analysis of levee safety shall include consideration of the worst case situations of high tides coupled with storm-driven waves.

## 10.9 HAZARDOUS MATERIALS USES

### INTRODUCTION

Contra Costa County contains extensive heavy industrial development which may be associated with hazardous materials uses along its west and north coasts, as depicted in Figures 10-9a and 10-9b. Land uses involving hazardous materials or other hazards considered in this section include airports, the Concord Naval Weapons Station, petroleum and chemical processing plants, oil and gas wells, and petroleum product and natural gas pipelines. In addition, land uses that involve hazards to navigation are considered here.

Heavy industrial land uses centered on the west and north shores of the County have the potential to present significant risk to public safety because of the hazardous nature of some petroleum and chemical materials. Potential hazards include explosion and flammability of petroleum products and other chemicals, and chemical toxicity. Hazardous materials uses are concentrated in heavy industries along the coasts, and are also present in lesser quantities in industrial parks in the County's interior. Notwithstanding industrial safety procedures, the presence of large quantities of hazardous materials in the County, particularly close to and/or upwind of populated areas, poses a potential safety hazard at all times.

Many industrial uses in the County are located on reclaimed marshland underlain by soft, wet, unstable mud. However, damage from earth movements are believed to have a low probability of occurrence because of adequate foundation design of buildings and other structures.

Information is not available on whether or not there are older tanks used to store hazardous materials that are not sufficiently stabilized. Informal observation of tanks in the County indicates that there is no requirement to space tanks far enough apart to prevent a fire or explosion from spreading. In areas in which tanks are closely spaced, particularly where these are close to population centers, there is a potential for a disaster affecting a significant population. Although historic accident records suggest that such a risk is low, the seriousness of the event, should it occur, indicates that some additional measure of public safety may be advisable.

Hundreds of miles of pipelines for the transportation of natural gas, crude oil, and refined petroleum products traverse Contra Costa County, including residential and commercial areas. Such pipelines cross areas with active fault lines, landslide deposits, unstable slopes, and areas underlain by soft mud and peat. The risk presented to pipelines by geologic conditions has not been quantified. The public safety hazard from a pipeline

break would depend on the proximity of the accident to populated areas as well as the nature of the event that produced it (e.g., the landslide or earthquake).

In general, natural gas is believed to be less hazardous to the public than petroleum products because it is transported at lower pressures and, when released, rises and dissipates into the atmosphere. Petroleum products are pumped at pressures up to 200 pounds per square inch and, when released, flow along the ground. Petroleum fires are also more likely to spread to nearby property than vertical-burning natural gas fires.

Several hundred active gas and oil wells are located in the County, most of which are far from populated areas. Although there is a risk of a well catching on fire, such incidents have been very few and the risk of such a fire causing a general disaster is remote. North and east of Brentwood, future parcel splits resulting in a dispersed but sizeable population could lead to a public safety hazard if rural residential areas are permitted to encroach on the gas producing area. Further, a concentrated population in proximity to the numerous wells in peat areas could expose persons and properties to peat fires which are difficult to control and may smoulder for weeks or months before they are completely extinguished.

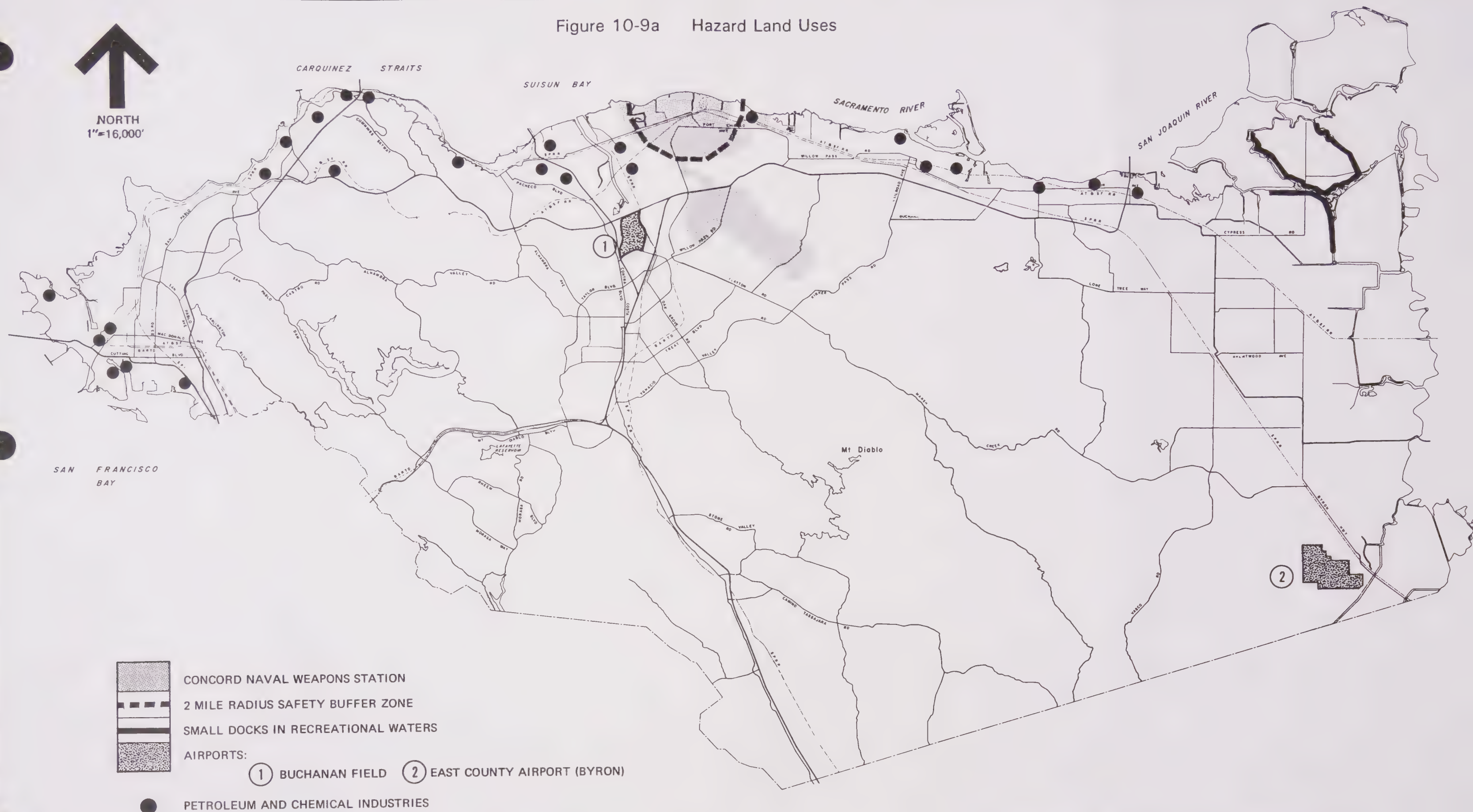
No particular routes for hazardous materials transportation are designated in the County. Most of these materials are regularly carried on the freeways and major roads designated as explosives routes. The proximity of some of these routes to large numbers of people suggests that an accident involving hazardous materials transportation could reach disaster proportions. The extreme toxicity of some chemicals used in the County and the specialized handling and cleanup procedures required during an accident make proper information and training of local response agencies, such as the police and fire departments, essential.

A unique risk to public safety is presented by transportation in the County of quantities of various radioactive materials. In the event of an accident, small amounts of radioactive materials can be dislodged from their protective containers and become extremely difficult to locate. Emergency response to a spill involving radioactive materials requires special knowledge and equipment, and persons may be unknowingly subjected to radiation in traffic accidents or other routine mishaps.

Explosives are defined in the California Health and Safety Code (Section 25651) as any substance or combination of substances the primary purpose of which is detonation or rapid combustion. Most munitions and some chemical materials are included in the Class A explosives category regulated by the State and various



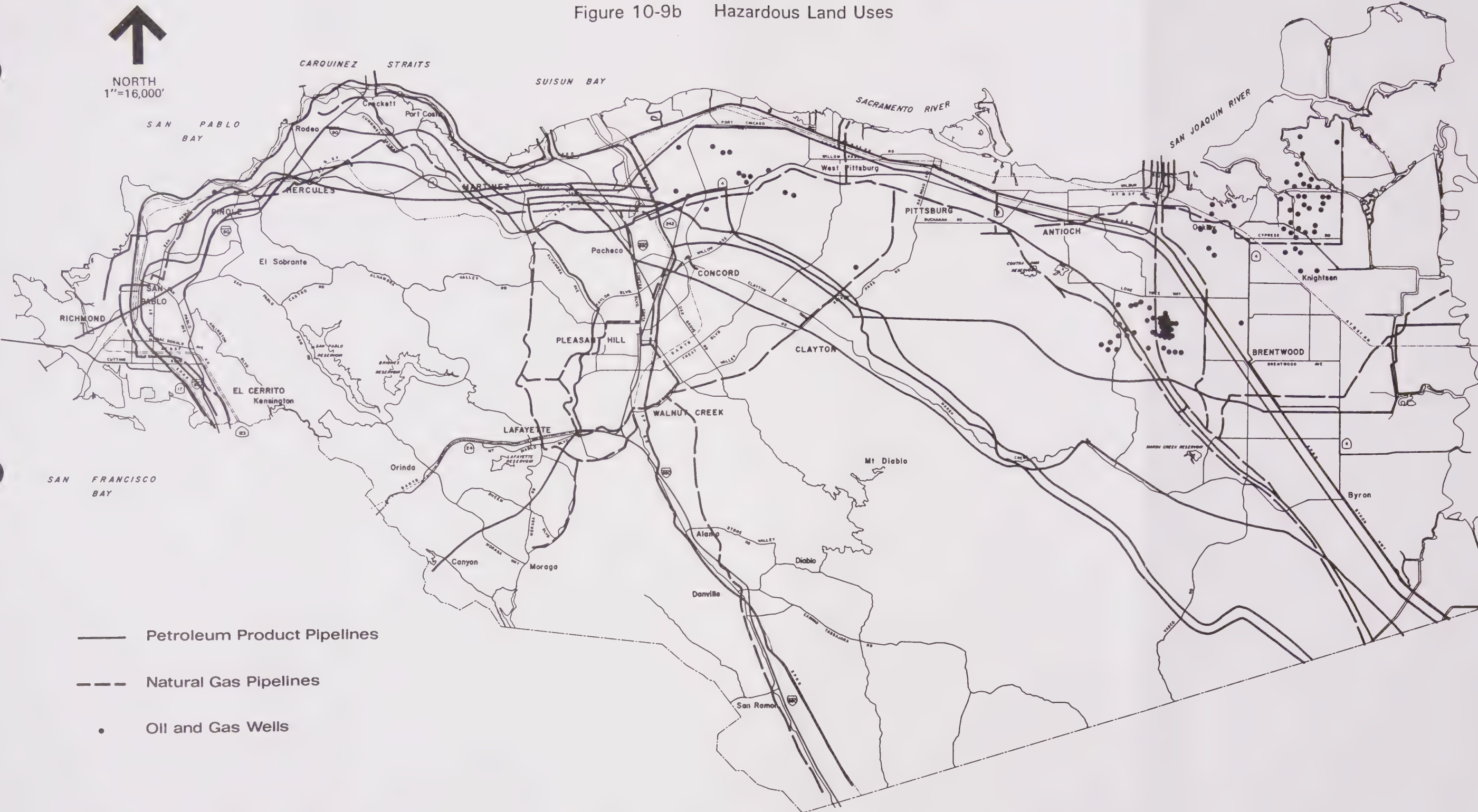
Figure 10-9a Hazard Land Uses



# CONTRA COSTA COUNTY CALIFORNIA



Figure 10-9b Hazardous Land Uses



- Petroleum Product Pipelines
- - - Natural Gas Pipelines
- Oil and Gas Wells





bridge authorities. There are numerous users of explosive materials in the County, but by far the largest is the Concord Naval Weapons Station (CNWS), to and from which munitions are regularly transported by truck, train and ship. Other explosives used for construction and quarrying are present in smaller amounts throughout the County.

Two major railroad companies serve Contra Costa County -- Santa Fe and Southern Pacific -- and both transport munitions for CNWS. Truck transportation of explosives through populated areas constitutes a potential significant public safety hazard. Permitted routes designated by the California Highway Patrol include the major freeways and other highways in the County. While training requirements exist for carriers of hazardous materials, including explosives, they may be unable to perform immediate remediation of emergency conditions under some situations.

The County is responsible for determining land uses and community development configuration within its jurisdiction, but does not determine the nature of substances used on industrial and military sites. Nor does the County grant permits for the use or transportation of hazardous materials, determine appropriate routes for transporting these materials, or require properly informed emergency personnel. Public safety in regard to the use and transportation of hazardous substances generally depends on actions by the State and federal governments.

In the case of land uses involving hazardous materials, the County Planning Agency can minimize public safety risks by ensuring that hazardous materials use areas and residential populations are separated to the extent that fire or explosions on industrial and military properties or in gas and oil well areas will not spread to homes or businesses. Preventing environmental releases of hazardous materials depends primarily on industrial safety requirements and procedures. By requiring that project proposals to construct tanks, pipelines, and other facilities be accompanied by thorough investigations of the natural and man-made hazards potentially affecting the proper functioning of these facilities, the County can be assured that risks are reduced to the minimum level that can be achieved by engineering technology.

Since emergency and disaster plans and procedures have been prepared by the County Office of Emergency Services (OES), it is appropriate for all potentially disastrous events to be reported to this office, so that County emergency services such as traffic control, fire and medical equipment, and evacuation notification can be available if needed. It is expected that emergency planning issues related to air traffic congestion at the Buchanan Field airport will be relieved by the construction of the East Contra Costa County Airport.

Contra Costa County is home to numerous businesses and industries that manufacture, store, use and dispose of hazardous materials and hazardous waste. These businesses are neighbors to an increasingly urbanized population. To ensure the protection of public health and safety and the environment, it is imperative to plan for the safe and effective use of hazardous materials and the management of hazardous waste. In recent years, there has been a growing understanding of the widespread use of hazardous materials.

Contra Costa County began planning specifically for the management of hazardous materials and waste in 1983, with the establishment of the County Hazardous Waste Task Force. Most recently, the County has completed the County Hazardous Waste Management Plan, a comprehensive analysis of all aspects of hazardous waste management from generation through disposal. The plan establishes goals and policies for the safe management of hazardous waste, and recommends the establishment of programs designed to reduce hazardous waste generation by 30 to 40 percent by the year 2000. The plan, which serves as the primary planning document for hazardous waste management in the County and in the incorporated cities, projects the need for commercial hazardous waste management facilities and specifies criteria to determine whether a facility may be established.

The management of hazardous materials is the focus of the Contra Costa County Hazardous Materials Area Plan, which was adopted in January of 1988. This Plan outlines the procedures that County regulatory and response agencies will use for managing, monitoring, containing and removing hazardous materials from the site of an actual or threatened accidental release. The plan also identifies the agencies within the County responsible for the effective management of hazardous materials.

### Navigational Hazards

With over 70 square miles of water and hundreds of miles of shoreline along the bays, rivers and sloughs, off-shore waters are particularly important in Contra Costa County for industrial, commercial, agricultural and recreational uses. The public right to use open water for navigation is established in the State constitution and State law, but navigation can be hazardous if land-based activities result in obstructions such as docks, low bridges, or elevated pipelines.

Where waters are shallow for some distance from shore commercial and industrial docks are usually built out to the shipping channel as a more acceptable plan than continuously dredging a side channel closer to shore. The Corps of Engineers permit system prevents docks from encroaching into shipping channels. Small docks for commercial or private recreational use have proliferated around Bethel Island and on the mainland side



of Sand Mound Slough. The U.S. Department of the Interior, noting "a plethora of uses not associated with commerce activities" on the State's waterways indicates that controls are necessary to protect the public right to use navigable waters.

It should also be recognized that because thousands of boaters use the Delta annually, many of them not skilled, the proliferation of smaller docks may be a hazard to public safety. The risk would not be of a disastrous single event, but is rather a persistent hazard probably affecting only a few persons at a time.

As previously mentioned, additional discussion of the County HWMP and related General Plan goals and policies is provided in the Public Facilities/Services Element of this document. For a listing of General Plan goals regarding hazardous waste management, the reader is directed to Section 7.12.

## HAZARDOUS MATERIALS GOALS

- 10-I. To provide public protection from hazards associated with the use, transport, treatment and disposal of hazardous substances.

## HAZARDOUS MATERIALS POLICIES

- 10-61. Hazardous waste releases from both private companies and from public agencies shall be identified and eliminated.
- 10-62. Storage of hazardous materials and wastes shall be strictly regulated.
- 10-63. Secondary containment and periodic examination shall be required for all storage of toxic materials.
- 10-64. Industrial facilities shall be constructed and operated in accordance with up-to-date safety and environmental protection standards.
- 10-65. Industries which store and process hazardous materials shall provide a buffer zone between the installation and the property boundaries sufficient to protect public safety. The adequacy of the buffer zone shall be determined by the County Planning Agency.
- 10-66. The County shall provide the East Contra Costa Airport which should relieve air traffic congestion at Buchanan Field.
- 10-67. To the greatest possible extent, new fuel pipelines should not be routed through centers of population nor should they cross major disaster evacuation routes.
- 10-68. In order to provide for public safety, urban and suburban development should not take place in areas where they would be subject to safety hazards from oil and gas wells. Development near oil and gas wells should meet recognized safety standards.

- 10-69 When an emergency occurs in the transportation of hazardous materials, the County Office of Emergency Services shall be notified as soon as possible.
- 10-70 Industry should be encouraged to utilize underground pipelines, rail, and water transportation of hazardous materials to the greatest extent feasible to take advantage of the greater separation from the general public provided by these modes of transportation.
- 10-71 Applications for private or commercial recreation docks which would encroach into waterways used primarily for recreation boating should be reviewed by the County to evaluate their aggregate impact upon public safety.

## HAZARDOUS MATERIALS IMPLEMENTATION MEASURES

- 10-ad. Encourage the State Department of Health Services and the California Highway Patrol to review permits for radioactive materials on a regular basis and to promulgate and enforce public safety standards for the use of these materials, including the placarding of transport vehicles.
- 10-ae. Request that State and federal agencies with responsibilities for regulating the transportation of hazardous materials review regulations and procedures, in cooperation with the County, to determine means of mitigating the public safety hazard in urbanized areas.

## 10.10 WATER SUPPLY REQUIREMENTS

### INTRODUCTION

This section of the Safety Element focuses on water supply safety issues. For a discussion of issues related to general domestic water supply, the reader is directed to the Public Facilities and Services Element of this general plan.

Water supply requirements increase during a disaster, with extra amounts being used for fire fighting, sanitation, and debris clean up. Damages to this essential supply can occur in the centralized parts of water supply systems—the intakes, canals, and major reservoirs—or at the delivery points as a result of disruption of main lines or of the many subsidiary lines to each home, school, business, or hospital.

Damage to centralized parts of the water supply system has the potential to affect thousands of persons but can be repaired relatively quickly. Loss of water in localized areas would affect fewer people, but because repair times could be long, hazards to property and safety could be greater for inhabitants of such areas. In a general or widespread disaster the water supply to several parts of the County could be disrupted for days or weeks. Although the risk of such an event is believed to be low, the seriousness of the impact on affected communities indicates that citizens, water suppliers and government agencies should be prepared to supplement water supplies for disaster recovery uses.

Large low-density areas of the County do not use water from large public systems, but instead rely on wells. These areas would be expected to have less difficulty supplying water in the event of a disaster such as an earthquake.

#### WATER SUPPLY GOALS

- 10-J. To ensure a continuous supply of safe water to county residents.
- 10-K. To protect the quality, quantity, and productivity of water resources as vital resources for maintaining the public, ecological and economic health of the region.
- 10-L. The safety of valuable underground water supplies for present and future users shall be ensured by preventing contamination.
- 10-M. All wells and other entrances to aquifers shall be identified and protected.

#### WATER SUPPLY POLICIES

- 10-72. The County shall support local, regional, State, and federal government efforts to improve water quality.
- 10-73. The County shall support water quality standards adequate to protect public health in importing areas as a priority at least equal in status to support of Bay/Delta estuary water standards.
- 10-74. Point sources of pollution shall be identified and controlled to protect adopted beneficial uses of water.
- 10-75. Public ownership of lands bordering reservoirs shall be encouraged to safeguard water quality.
- 10-76. Prohibit underground discharges of toxic liquid wastes.
- 10-77. Land use plans and major project proposals that would encourage development served by wells and septic systems shall be approved only after there are assurances of the adequacy of the aquifer and that there is minimum risk of well contamination during the rainy season.
- 10-78. Annexation of municipal or small service districts into the larger districts shall be supported when such annexations would result in water supply safety benefits to the consumers.
- 10-79. No new water districts shall be established.
- 10-80. The use of reclaimed water for industrial operations shall be encouraged.
- 10-81. Because of the public need for water of a quality suitable for domestic, industrial and agricultural uses, the County shall take an active role in reviewing regional, State and federal programs which could affect water quality and water supply safety in Contra Costa County.
- 10-82. New water storage reservoirs shall be encouraged in appropriate locations subject to adequate mitigation of environmental impacts.



- 10-83. Discourage the development of new wells for domestic use in areas with high nitrite concentrations in the ground water.

## WATER SUPPLY IMPLEMENTATION MEASURES

- 10-af. A permit system shall be required for all future wells or other shafts to aquifers.
- 10-ag. Monitoring of well water quality shall be required.
- 10-ah. Develop drilling and sealing ordinances designed for protection of aquifers and the public health and welfare.
- 10-ai. Instruct the County Health Department to do a study of the nitrite groundwater problem for East County including recommendations on continued approval of new wells for residential use.
- 10-aj. Prohibit underground discharge of toxic liquid wastes through adoption of a hazardous materials ordinance or other means.
- 10-ak. Encourage local, State, and federal agencies to investigate and recommend methods of maintaining agricultural productivity with reduced amounts of toxic and nutritive chemicals which can damage water quality.
- 10-al. Encourage all water districts in their efforts to provide water supply safety for emergency and disaster uses by the most practicable means.
- 10-am. Encourage domestic water services to participate in the State Emergency Services program for county-wide coordination of emergency response planning and to take advantage of low cost purchase of auxiliary power equipment where these programs would result in greater security for domestic water supplies.
- 10-an. Encourage domestic water suppliers to undertake programs to inform homeowners, schools, convalescent hospitals, and other institutions of appropriate and efficient emergency use of available water in an immediate post-disaster recovery period.
- 10-ao. Review and evaluate regional, State, and federal programs which could affect water quality and water supply safety in the County.

## 10.11 PUBLIC PROTECTION SERVICES AND DISASTER PLANNING

### INTRODUCTION

This section of the Safety Element includes a discussion of the essential public protection services which will provide the major work force, facilities and equipment for disaster recovery.

The Contra Costa County Office of Emergency Services prepares disaster plans for the county and coordinates required emergency services and facilities from all agencies and levels of government to meet emergency and

disaster needs. While there is some overlap between this element and the Public Facilities and Services Element, the policies contained here are primarily related to disaster situations, rather than to ongoing facilities and services standards.

Aside from the emergency/disaster situations previously described in this element such as earthquakes, floods and accidental releases of hazardous materials, the Safety Element addresses the additional areas of wildfire, emergency medical response and crime prevention.

### Wildfire

Fire hazards present a considerable problem to vegetation and wildlife habitats throughout the County. Grassland fires are easily ignited, particularly in dry seasons. These fires are relatively easily controlled if they can be reached by fire equipment; the burned slopes, however, are highly subject to erosion and gullying. While brushlands are naturally adapted to frequent light fires, fire protection in recent decades has resulted in heavy fuel accumulation on the ground.

Brush fires, particularly near the end of the dry season, tend to burn fast and very hot, threatening homes in the area and leading to serious destruction of vegetative cover. While woodland fires are relatively cool under natural conditions, a brush fire which spreads to a woodland could generate a destructive hot crown fire. No suitable management technique of moderate cost has been devised to reduce the risk of brush fires.

Because the natural vegetation and dry-farmed grain areas of the County are extremely flammable during the late summer and fall, wildfire is a serious hazard in undeveloped areas and on large lot homesites with extensive areas of unirrigated vegetation. Several factors affect the relative degree of wildfire hazard, including atmospheric humidity, slope steepness, vegetation type, exposure to the sun, wind speed and direction, accessibility to human activities and accessibility to firefighting equipment. Taking these factors into consideration, a fire hazard severity scale has been devised which characterizes areas throughout the County by the number of days of moderate, high and extreme fire hazard. Mapped information on fire hazard severity is included later in this section.

Peat fires represent a special hazard in that once ignited, they are extremely difficult to extinguish. In some instances, islands have been flooded in order to extinguish peat fires. Any area lying generally east of the mean high water line may be peaty due to the marshy origin of the soil, although local areas of mineral soil are present within the general area.

### Emergency Medical Response

Medical emergency services are provided by hospitals, ambulance companies and fire districts. Considerable thought and planning have gone into efforts to improve responses to day-to-day emergencies and planning for a general disaster response capability. However, certain areas remain which require improvement to enhance public safety.

Identification of streets, house numbers, and townhouse and apartment units remains a major factor hampering locating patients. Design of multi-story buildings rarely includes provision for elevators or stairways which can accommodate gurneys, which are preferred for patient transport because they allow for continuous care. In the event of a disaster, many persons could be affected.

Although substantial progress has been made in terms of earthquake restrainers being added to freeway overpasses, cities and communities with limited access to hospitals, such as Lafayette, Moraga and Orinda, are still at some risk to access blockage due to the potential for landslides or traffic accidents to temporarily close roads.

### Crime Prevention

While it is not a purpose of this element to deal with crime as such, there are planning-related opportunities to aid in the efficiency of police services and incorporate crime reducing features into development projects which could enhance public safety at relatively little public cost.

Response times can be hampered by uncoordinated street naming between jurisdictions, or by conflicting street numbering between cities and the County on the same road/street name.

Defensible space is a concept which incorporates crime prevention principles into development design. This concept has already been discussed in the "Public Protection" section of the Public Facilities/Services Element.

### Maps

In general, the fire hazard severity is related to distance from the marine atmospheric influences of the Pacific Ocean, intervening topography, slope steepness and vegetative type and coverage. Figure 10-10 shows these areas.



## PUBLIC PROTECTION SERVICES AND DISASTER PLANNING GOALS

- 10-N. To provide for a continuing high level of public protection services and coordination of services in a disaster.

## PUBLIC PROTECTION SERVICES AND DISASTER PLANNING POLICIES

- 10-84. The Office of Emergency Services, in cooperation with cities within the County, shall delineate evacuation routes and, where possible, alternate routes around points of congestion.
- 10-85. The Office of Emergency Services, in cooperation with public protection agencies, shall delineate emergency vehicle routes for disaster response, and where possible, alternate routes where congestion or road failure could occur.
- 10-86. In order to ensure prompt public protection services, dwelling unit numbers shall be required to be easily seen from the street or road.
- 10-87. In order to reduce the risk of crime at little public cost, the County shall encourage the use of citizen action programs such as Neighborhood Alert and Operation ID.
- 10-88. The County shall require adequate access for medical emergency equipment in high-occupancy buildings of over two stories.
- 10-89. Every high-rise building shall be designed and constructed to provide for the evacuation of occupants and/or for the creation of a safe environment in case of a substantial disaster, such as a severe earthquake or fire.
- 10-90. Policies related to wild land fire risk are contained in the Fire Services section of the Public Facilities Element.
- 10-91. Restrict homes built in rural areas or adjacent to major open space areas from having roofs which are covered with combustible materials.

Figure 10-10 contains the characterization of fire hazard for the County by Fire Weather Classes, and delineates those areas of the County which are subject to peat fires.

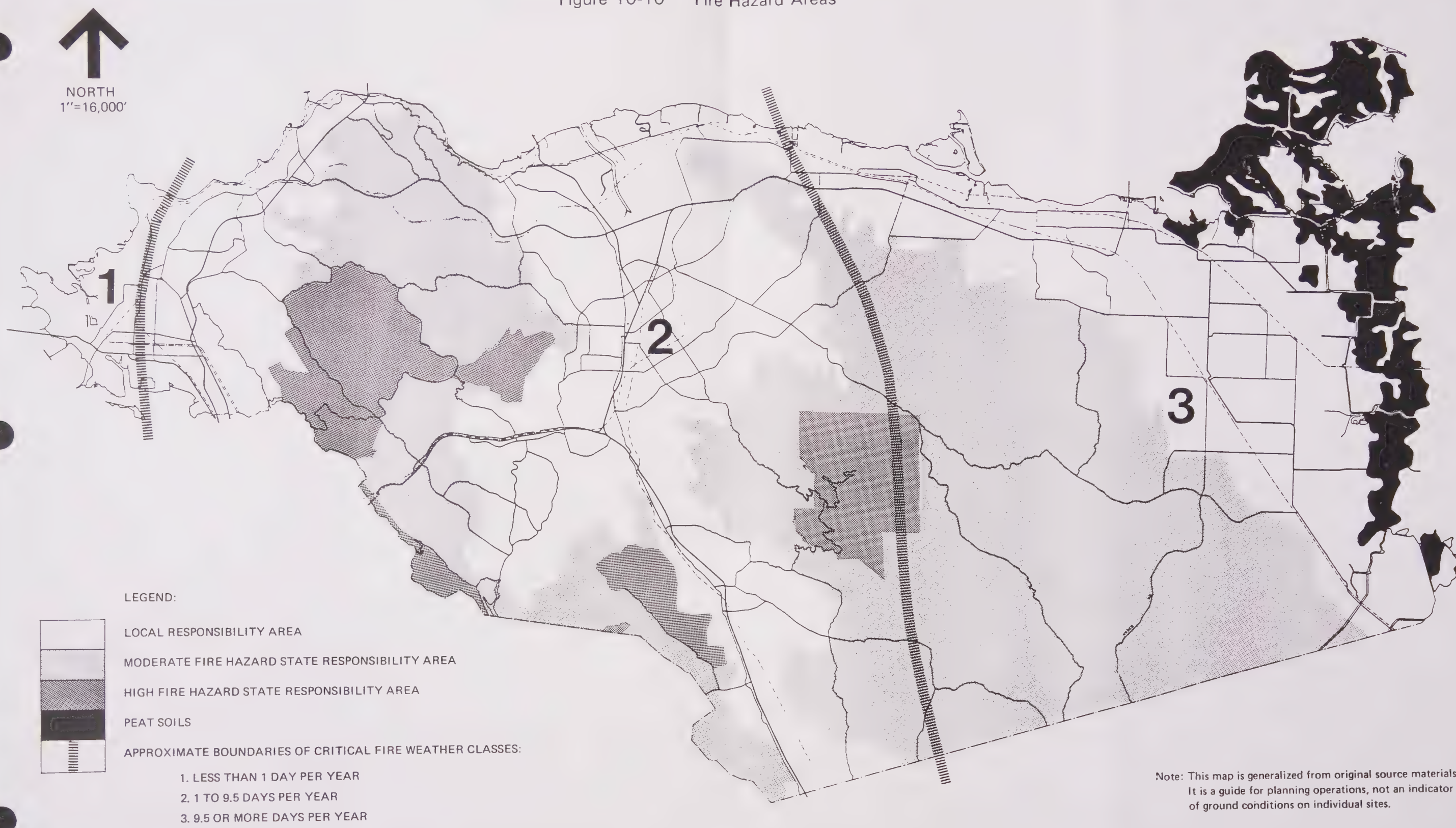
The Fire Weather Classes depicted on Figure 10-10 are defined in terms of the number of days per year of Critical Fire Weather. Class 1 has 0 to 1 days per year of Critical Fire Weather, Class II has 1 to 9.5 days and class III has over 9.5 days.

## PUBLIC PROTECTION SERVICES AND DISASTER PLANNING IMPLEMENTATION MEASURES

- 10-ap. Undertake a program in cooperation with cities within the County to unify street name and numbering systems.

- 10-aq. In cooperation with cities within the County and public protection agencies, delineate evacuation routes, emergency vehicle routes for disaster response and, where possible, alternative routes where congestion or road failure could occur.
- 10-ar. Development of areas identified by the criteria of the State Division of Forestry as having an Extreme Fire Hazard will be avoided where possible. Homes located in extreme or high fire hazard areas will be constructed with fire-resistant materials and the surroundings should be irrigated or landscaped with fire resistant plants.
- 10-as. Require projects which encroach into areas which are determined to have a high or extreme fire hazard, or which incorporate wildfire hazard areas, to be reviewed by the appropriate Fire Bureau to determine if special fire prevention measures are advisable.
- 10-at. Major developments will not be approved if fire fighting services are not available or are not adequate for the area.

Figure 10-10 Fire Hazard Areas



Note: This map is generalized from original source materials. It is a guide for planning operations, not an indicator of ground conditions on individual sites.

SOURCE: Fire Prevention Bureau  
State of California  
Department of Forestry and Fire Protection  
Sacramento, CA











## 11. NOISE ELEMENT

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## 11. NOISE ELEMENT

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### 11.1 INTRODUCTION

Section 65302 (f) of the California Government Code requires that a noise element be prepared as a part of all city and county general plans. This State law requires that a jurisdiction's noise element identify and work toward mitigation of noise problems in the community. This Noise Element analyzes and quantifies, to the extent practical as determined by the legislative body, current and projected noise levels for all of the following sources:

- o Highways and freeways;
- o Primary arterials and major local streets;
- o Passenger and freight on-line railroad operations and ground rapid transit systems;
- o Commercial and general aviation, heliport, helistop, and military airport operations; aircraft flyovers, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation;
- o Local industrial plants including, but not limited to, railroad classification (switching) yards; and
- o Other ground stationary noise sources identified by local agencies as contributing to the community noise environment.

Noise contours are shown for many of these sources and stated in terms of the day/night average sound level (DNL or  $L_{dn}$ ). The noise contours are to be used to guide land uses, as specified in the Land Use Element, so that the exposure of community residences to excessive noise is minimized.

According to the Code, noise elements shall also include implementation measures and possible solutions that address any existing and perceivable noise problems. The adopted Noise Element shall serve as a guideline for compliance with the State Noise Insulation Standards. (Title 24, Part II, CCR.)



This Noise Element follows the guidelines established by the California Department of Health Services entitled, "Guidelines for the Preparation and Content of the Noise Element of the General Plan." The State Guidelines define noise metrics, discuss the process of Noise Element development, and present land use compatibility guidelines based on various noise levels. The contents of the State's guidelines document were reviewed in preparation of this Element and the relevant portions are incorporated into this document.

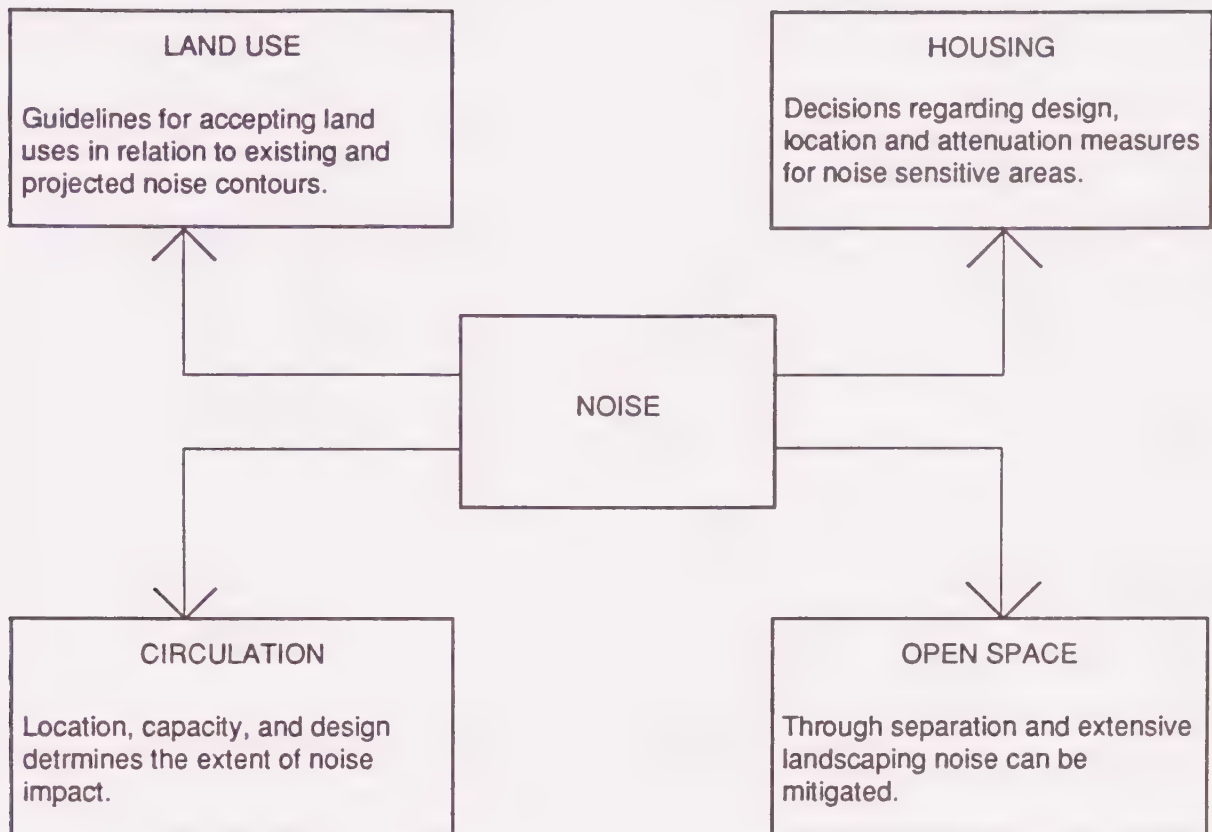
## **11.2 RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS**

The General Plan elements are important tools used by elected officials to provide policy guidance and assist in decision making. All of the elements of the General Plan are related and interdependent to some degree. However, the Noise Element is most closely related to the Land Use, Housing, Circulation, and Open Space Elements, as shown in Table 11-1.

The major objective of a noise element is to provide guidelines to achieve noise land use compatibility. The Land Use and Noise Elements, therefore, are related closely. By identifying noise-sensitive land uses and establishing compatibility guidelines for land use and noise, the Noise Element will influence the general distribution, location, and intensity of future land use. Effective land use planning can alleviate noise problems.

Residential areas are one of the noise-sensitive land uses. Therefore, the Housing Element is directly affected by the Noise Element. The Housing Element policies and programs should include safeguards against noise intrusion. The implementation of Land Use/Noise Compatibility Guidelines can reduce noise impacts in residential locations. In addition, proper noise mitigation measures during housing construction can guard against adverse noise impact.

A city's circulation system is one of the major sources of continuous noise. Therefore, the existing and future circulation system identified in the Circulation Element will influence greatly the Noise Element. Circulation routes such as freeways, highways, and truck routes should be located to minimize the noise impact on noise-sensitive land uses. The location and design of transportation facilities and possible mitigation of noise from existing and planned facilities will greatly influence the overall noise environment within the City.



**Table 11-1** RELATIONSHIP OF NOISE ELEMENT TO OTHER GENERAL PLAN ELEMENTS

Since noise can affect adversely the enjoyment of quiet activities in open space, the Noise Element is also related closely to the Open Space Element. Inversely, open space can be used as a noise buffer between incompatible land uses. This technique can reduce community noise levels and also provide usable open space for recreation.

### 11.3 RELATIONSHIP TO OTHER GENERAL PLAN DOCUMENTS

The goals, policies and implementation measures contained in this Element are intended to guide planning for public and private projects that are subject either to approval of the County Planning Agency or to review by County staff, although they may be under the jurisdiction of other public agencies operating in the County. Such goals, policies and implementation measures are further intended to be in accordance with the other elements of the General Plan, as well as with other planning documents. This Element completely supersedes the 1975 Noise Element.

#### ACOUSTICAL STANDARDS

Many governmental agencies have promulgated noise standards for various types of projects. In general, these standards are intended to protect persons from excessive exterior and interior noise. Most of these standards address vehicular traffic noise while others address rail, aircraft, or fixed sources.

The Department of Housing and Urban Development (HUD) has developed noise policies for federal housing projects. These HUD policies are contained in The Noise Guidebook. The policies contained in the guidebook discuss various outdoor noise environments and recommend acceptable interior and exterior noise level goals.

The State of California has adopted Title 21 and Title 24, Part 2, of the California Code of Regulations. Title 21 limits airport noise near residential communities to minimize existing and future land use conflicts. Title 24, Part 2, is concerned with transportation and industrial noise sources and specifically regulates the maximum allowable interior noise level for hotels, motels, and multi-family housing. Title 24, Part 2, also establishes standards for sound isolation of party walls, corridor walls, and floor/ceiling assemblies in multi-family residential construction.



The Federal Highway Administration (FHWA) and California Department of Transportation (Caltrans) have similar policies for new roadway construction and roadway expansion. These policies contain maximum acceptable noise levels in areas adjacent to vehicular traffic. These policies also have guidelines for determining when noise barriers should be constructed.

The County's Airport Land Use Commission (ALUC) oversees development near airports. The ALUC has a plan which contains goals and policies. These policies are considered when a project is proposed near an airport or heliport in the County. In addition to a noise element, counties and cities can also adopt noise ordinances. A noise ordinance is intended to regulate sources such as amplified music, construction and mechanical equipment.

#### 11.4 NOISE ELEMENT ORGANIZATION

The Noise Element is divided into six remaining sections. These sections define noise problems; quantify the noise problems; set up goals and policies; and, finally, provide implementation measures to minimize or eliminate the noise problems.

#### 11.5 FUNDAMENTAL CONCEPTS OF ENVIRONMENTAL NOISE

##### BACKGROUND

Three aspects of community noise are important in determining subjective response:

- The level of the sound (i.e., magnitude or loudness);
- The frequency composition or spectrum of the sound; and
- The variation in sound level with time.

Airborne sound is a rapid fluctuation of air pressure and local air velocity. Sound levels are measured and expressed in decibels (dB) with 0 dB roughly equal to the threshold of hearing.

The frequency of a sound is a measure of the pressure fluctuations per second, measured in Hertz (Hz). Most sounds do not consist of a single frequency, but are comprised of a broad band of frequencies differing in level. The characterization of sound level magnitude with respect to frequency is the sound spectrum. A sound spectrum is often described in octave bands that divide the audible human frequency range (i.e., from 20 to 20,000 Hz) into ten segments. Figure 11-1 shows a range of sound spectra for various types of sound over the audible hearing range.

## FREQUENCY WEIGHTING

Many rating methods exist to analyze sound of different spectra. Generally, the simplest method is used so that measurements may be made and noise impacts readily assessed using basic acoustical instrumentation. This method evaluates all frequencies by using a single weighting filter that progressively de-emphasizes frequency components below 1000 Hz and above 5000 Hz. This frequency weighting, shown in Figure 11-2, reflects the relative decreased sensitivity of humans to both low and extremely high frequencies. This weighting is called A-weighting and is applied by an electrical filter in all U.S. and international standard sound level meters. Some typical A-weighted sound levels are presented in Figure 11-3.

## NOISE EXPOSURE

Noise exposure is a measure of noise over a period of time, whereas the noise level is at an instant in time. Although a single sound level may describe adequately community noise at any moment, community noise levels vary continuously. Most community noise is produced by many distant noise sources that produce a relatively steady background noise having no identifiable source. These distant sources change gradually throughout the day and include traffic, wind in trees, and distant industrial activities. Superimposed on this slowly varying background is a succession of identifiable noise events of brief duration. These include nearby activities, such as single vehicle passbys or aircraft flyovers.

A single number called the equivalent sound level ( $L_{eq}$ ) is used to describe the average noise level over a period of time (i.e., the total sound energy divided by the duration). Thus, the  $L_{eq}$  is the constant sound level that would contain the same acoustic energy as the varying sound level, during the same time period.

In determining the daily measure of community noise, it is important to account for the difference in human response to daytime and nighttime noise. Nighttime exterior background and household noise levels are generally lower than in the daytime. People are more sensitive to noise at night than during other periods of the day and exterior noise intrusions become more noticeable.

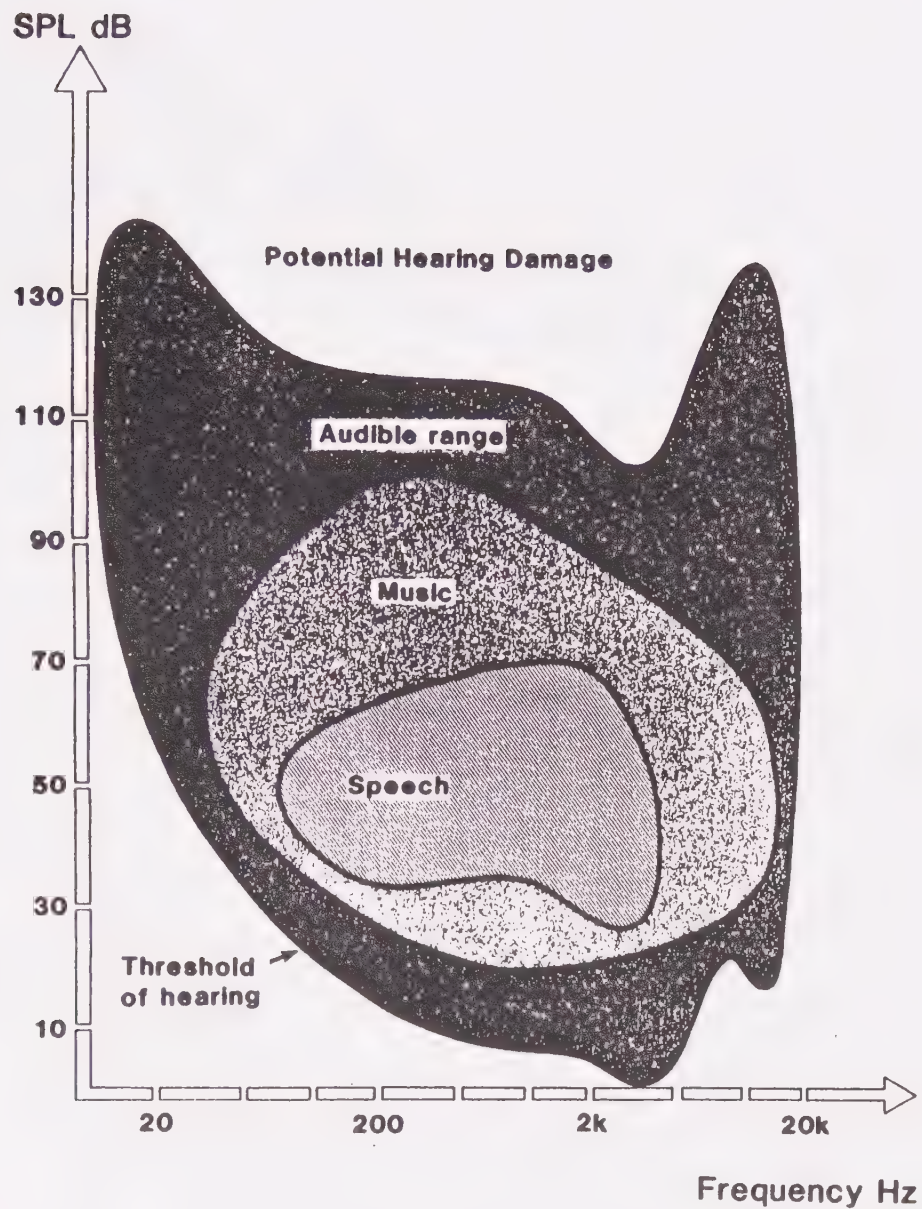


Figure 11-1 RANGE OF SOUND SPECTRA

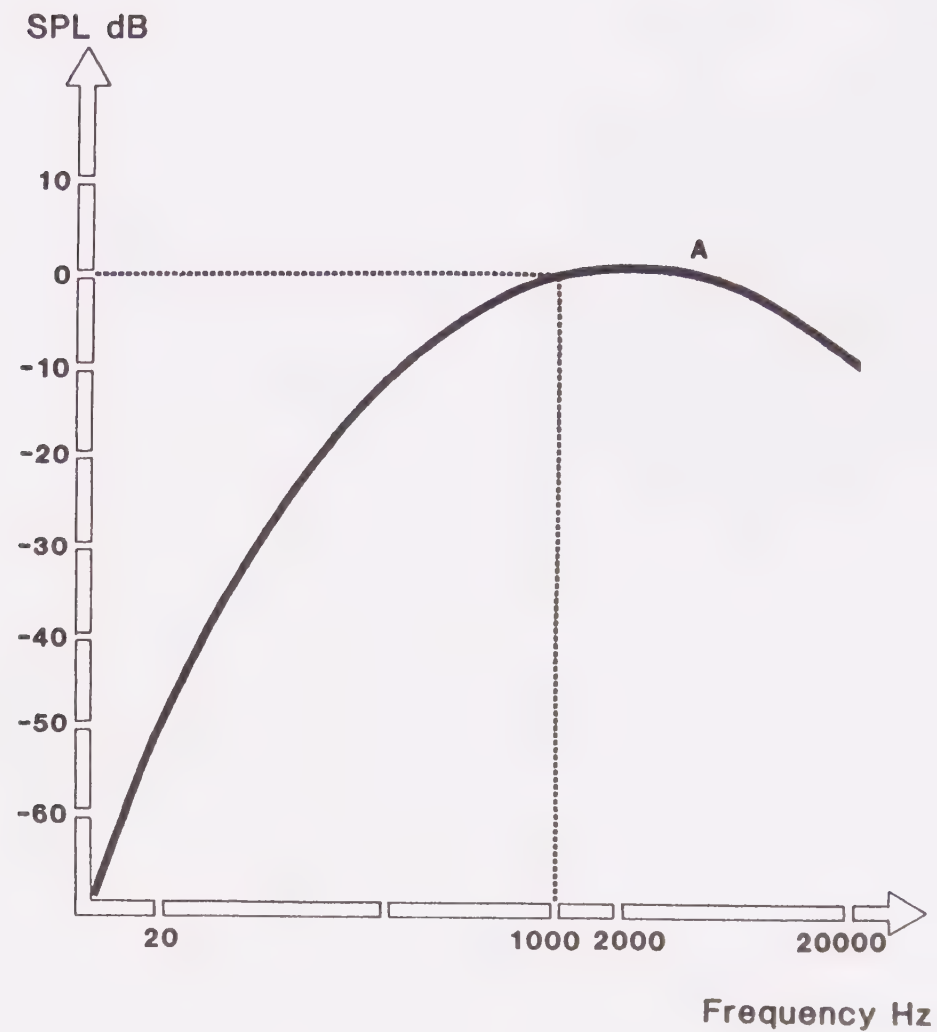


Figure 11-2 A-WEIGHTING NETWORK



A-WEIGHTED  
SOUND PRESSURE LEVEL,  
IN DECIBELS

|  |     |   |
|--|-----|---|
|  | 140 | } THRESHOLD OF PAIN                                       |
|  | 130 |   |
| CIVIL DEFENSE SIREN (100')                   | 120 |   |
| JET TAKEOFF (200')                           | 110 |   |
| RIVETING MACHINE                             | 100 | ROCK MUSIC BAND<br>PILEDRIIVER (50')                      |
| DIESEL BUS (15')                             | 90  | AMBULANCE SIREN (100')                                    |
| BAY AREA RAPID TRANSIT<br>TRAIN PASSBY (10') | 80  | BOILER ROOM<br>PRINTING PRESS PLANT                       |
| PNEUMATIC DRILL (50')                        | 70  | GARBAGE DISPOSAL IN THE HOME<br>INSIDE SPORTS CAR, 50 MPH |
| SF MUNI LIGHT-RAIL VEHICLE (35')             | 60  |   |
| FREIGHT CARS (100')                          | 50  | DATA PROCESSING CENTER<br>DEPARTMENT STORE                |
| VACUUM CLEANER (10')                         | 40  | PRIVATE BUSINESS OFFICE<br>LIGHT TRAFFIC (100')           |
| SPEECH (1')                                  | 30  | TYPICAL MINIMUM NIGHTTIME<br>LEVELS--RESIDENTIAL AREAS    |
| AUTO TRAFFIC NEAR FREEWAY                    | 20  |   |
| LARGE TRANSFORMER (200')                     | 10  | RECORDING STUDIO  |
| AVERAGE RESIDENCE                            | 0   | MOSQUITO (3')   |
| SOFT WHISPER (5')                            |     |   |
| RUSTLING LEAVES                              |     |   |
| THRESHOLD OF HEARING                         |     |   |

(100') = DISTANCE IN FEET  
BETWEEN SOURCE  
AND LISTENER

TYPICAL SOUND LEVELS  
MEASURED IN THE ENVIRONMENT  
AND INDUSTRY

Figure 11-3

To account for human sensitivity to nighttime noise, the DNL ( $L_{dn}$ ) descriptor was adopted by the Environmental Protection Agency to describe community noise exposure from all sources. The DNL is called the day-night sound level and represents the 24-hour A-weighted equivalent sound level with a 10-dB penalty added to the "nighttime" hourly noise levels (HNL) between 10:00 PM to 7:00 AM.

DNL and CNEL levels are typically computed by energy summation of HNL values, with the proper adjustment applied for the period of evening or night. The CNEL is computed identically to the DNL but with the addition of a 5-dB penalty to the evening HNL (i.e., 7:00 PM to 10:00 PM). The CNEL value is typically less than 1 dB above the DNL value. Figure 11-4 shows the adjustments applied for the DNL and CNEL measures. Noise exposure measures such as  $L_{eq}$ , HNL, DNL, and CNEL are all A-weighted, with units expressed in decibels.

### SUBJECTIVE RESPONSE TO NOISE

The effects of noise on people can be classified into three general categories:

- o Subjective effects of annoyance, nuisance, dissatisfaction;
- o Interference with activities such as speech, sleep, and learning; and
- o Physiological effects such as anxiety or hearing loss.

The sound levels associated with community noise usually produce effects only in the first two categories. No universal measure for the subjective effects of noise has been developed, nor does a measure exist for the corresponding human reactions from noise annoyance. This is primarily due to the wide variation in individual attitudes regarding the noise source(s).

An important factor in assessing a person's subjective reaction is to compare the new noise environment to the existing noise environment. In general, the more a new noise level exceeds the prior existing level, the less acceptable it is. Therefore, a new noise source will be judged more annoying in a quiet area than it would be in a noisier location.





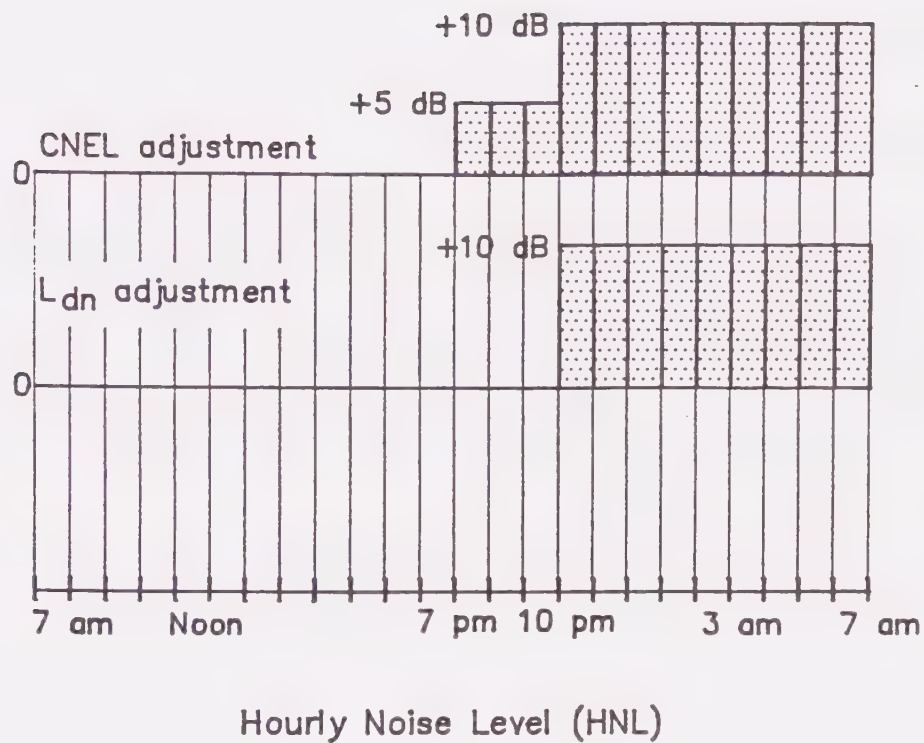


Figure 11-4 HOURLY NOISE LEVELS AND ANNUAL METRICS

Knowledge of the following relationships is helpful in understanding how changes in noise and noise exposure are perceived.:

- o Except under special conditions, a change in sound level of 1 dB cannot be perceived;
- o Outside of the laboratory, a 3 dB change is considered a just-noticeable difference;
- o A change in level of at least 5 dB is required before any noticeable change in community response would be expected; and
- o A 10 dB change is subjectively heard as an approximate doubling in loudness and almost always causes an adverse community response.

## COMBINATION OF SOUND LEVELS

Because we perceive both the level and frequency of sound in a non-linear way, the logarithmic decibel scale is used to describe sound levels. The frequency scale is also measured in logarithmic increments. Decibels, measuring sound energy, combine logarithmically. A doubling of sound energy (for instance, from two identical automobiles passing simultaneously) creates a 3-dB increase (i.e., the resultant sound level is the sound level from a single passing automobile plus 3 dB). The rules for decibel addition used in community noise prediction are:

- o If two sound levels are within 1 dB of each other, their sum is the highest value plus 3 dB;
- o If two sound levels are within 2 to 4 dB of each other, their sum is the highest value plus 2 dB;
- o If two sound levels are within 5 to 9 dB of each other, their sum is the highest value plus 1 dB; and
- o If two sound levels are greater than 9 dB apart, the contribution of the lower value is negligible and the sum is simply the higher value.

## 11.6 NOISE IN CONTRA COSTA COUNTY

### OVERVIEW

In Contra Costa County, traffic along freeways (e.g., Interstate 80, Interstate 680, State Route 24, and State Route 4), and major arterials (e.g., Willow Pass Road and Ygnacio Valley Road) are the primary sources of vehicular traffic noise.

Rail operations also contribute to the noise environment in the County. The Atchison Topeka and Santa Fe (ATSF) and Southern Pacific (SP) railroad corridors in the County are primarily freight lines. These lines generate high noise levels during passbys and their trains are required to sound their whistles when crossing

roadways at-grade. The Bay Area Rapid Transit (BART) system is an electrically driven passenger line. BART passbys are typically less noisy than the freight trains. BART trains do not have at-grade crossings.

Existing air traffic activity also contributes to the noise in Contra Costa County. Buchanan Field, near Concord, is the primary source of aircraft noise. Other sources of aircraft noise are local emergency airports and military helicopter activity.

The remaining noise sources are industrial plants such as oil refineries and materials processing plants. The Camp Parks Reserve Forces Training Area (RFTA) near San Ramon also is a noise source. Typical operations at Parks RFTA include small caliber weapons training, helicopter overflights, and vehicular activity.

#### ONGOING PROBLEMS

There are many areas within the County that have existing noise problems. Buchanan Field is a constant source of noise complaints. According to the County, it generates approximately 800 complaints a year. Interstate 80, 680 and Route 4 also generate complaints. However, these complaints typically are handled by the California Department of Transportation. Rail switching yards in Martinez and Richmond are also noisy and have generated complaints. Industrial noise sources that have generated complaints are the Shell Oil refinery in Martinez, and both the Gaylord Paper Mill and the DuPont Plant in Oakley.<sup>1</sup>

Noise measurements were made near several of the problem industrial noise sources to quantify the noise levels. Noise measurements were also made near the Southern Pacific rail switching yard in Martinez. Table 11-2 summarizes the results of these measurements.

Loud music, parties, sporting events at high schools, outdoor music at nightclubs, and, in the past, livestock, have also been the source of complaints to the County.



TABLE 11-2  
 DAYTIME EXISTING NOISE LEVELS FROM INDUSTRIAL SOURCES  
 AUGUST 1, 1990  
 BETWEEN 12:00 PM AND 5:00 PM<sup>1</sup>

| <u>Location</u>   | <u>L<sub>eq</sub></u><br>(in dB) | <u>L<sub>90</sub></u><br>(in dB) | <u>Comment</u>  |
|---|----------------------------------|----------------------------------|---|
| In Oakley, at intersection of Big Break Road and Vintage Parkway; 2000 feet from eastern edge of DuPont Plant.  | 54                               | 45                               | Noise from trucks and general plant activity; Antioch Bridge visible, but not audible; three car passbys on Big Break Road during 5-minute measurement.                             |
| In Oakley, 200 feet east and 300 feet south of steam pressure release stack at Gaylord Paper plant on Wilbur Avenue; 20 feet north of A.T. and S.F. trucks. | 69                               | 65                               | Noise from steam release was dominant; some 18-wheel truck activity; Wilbur Avenue barely audible.  |
| In Oakley, on Viera Avenue, 500 feet east and 400 feet south of steam release at Gaylord plant.   | 68                               | 63                               | Noise from steam release was dominant; in residential neighborhood; seven car passbys on Viera Avenue during 5-minute measurements; Wilbur Avenue barely audible.                   |
| In Oakley, on Viera Avenue, between Santa Fe Avenue and Brown Lane; 1000 feet south and 500 feet east of steam release at Gaylord plant.                    | 60                               | 55                               | Steam release noise still clearly audible; trees blocked line-of-sight to Gaylord plant; in residential neighborhood; four car passbys on Viera Avenue during 5-minute measurement. |
| In Martinez, at Southern Pacific rail yards; 60 feet from tracks.   | 68                               | 54                               | Amtrack passby at 85 dB, vibration perceptible; train switching activity was between 68 dB (engine only passby) and 84 dB (engine backing up with six cars attached).               |

<sup>1</sup> Duration of each measurement is five minutes.

## FORESEEABLE FUTURE PROBLEMS

Potential foreseeable future problems will be similar to many current problems. For example, residential land uses still will remain in relatively close proximity to some industrial noise sources. Currently, residential development is being built or proposed near Camp Parks RFTA. Although adequate setbacks and noise mitigation are usually incorporated into these projects, occasional complaints can be expected. Similarly, loud parties, outdoor music, and other industrial sources will continue to generate sporadic complaints. Activities at Buchanan Field are not anticipated to decrease in the future and may even increase. This activity would be expected to generate future complaints. Gas wells located in East County may be a source of future complaints. These wells generate a high-frequency hissing sound.

In preparing this Noise Element, all the existing noise complaints and potential future ones were considered in the development of goals and policies. The purpose of these goals and policies is to protect future residents from the negative impact of noise and, if possible, minimize and reduce the number of complaints the County receives.

### 11.7 NOISE CONTOURS

#### METHODOLOGY

Existing and future traffic noise levels are based on calculations using the Federal Highway Administration Traffic Noise Prediction Model (FHWA RD-77-108), continuous 24-hour noise measurements, and short-term 15-minute measurements along freeways and major arterials in the County. The FHWA method predicts the average hourly noise level along a roadway based on the number of vehicles, the speed of the vehicles, and the percentage of medium and heavy trucks.

The 24-hour average noise level (DNL) along a roadway, was calculated from the continuous 24-hour noise measurements. Along some roadways, however, only a 15-minute noise measurement was made. To calculate the DNL, the 15-minute measurement results were compared to the noise level measured during the same time period at a 24-hour noise measurement location on a nearby or similar roadway. The difference between the measured hourly noise levels and the DNL then was calculated for the 24-hour measurement location and the same offset was applied for the 15-minute measurement location.

To determine the 24-hour noise level where no measurements were taken, the peak hour  $L_{eq}$  was calculated using the FHWA method and traffic volumes provided by the County. The DNL was determined in a manner similar to that of the short-term measured roadways. By comparing the peak-hour noise level ( $L_{eq}$ ) and the DNL from 24-hour noise measurements made in the vicinity of the roadway, a peak hour  $L_{eq}$  to DNL offset

was determined. This offset was applied to the calculated peak hour level to determine the DNL at the non-measured location.

## NOISE CONTOUR MAPS/TABLES

### Roadways/Rail Lines

Existing and future DNL noise contours have been prepared for freeways, major arterials, and railways in the County. The contours were prepared on USGS quad maps. A reduced set of the future contours are provided in this document (see Figures 11-5A through 11-5U). Table 11-3 summarizes the information contained in the future noise contours. A complete set of full size existing and future noise contours is available for public review at the Community Development Department offices.

### Airports/Heliports

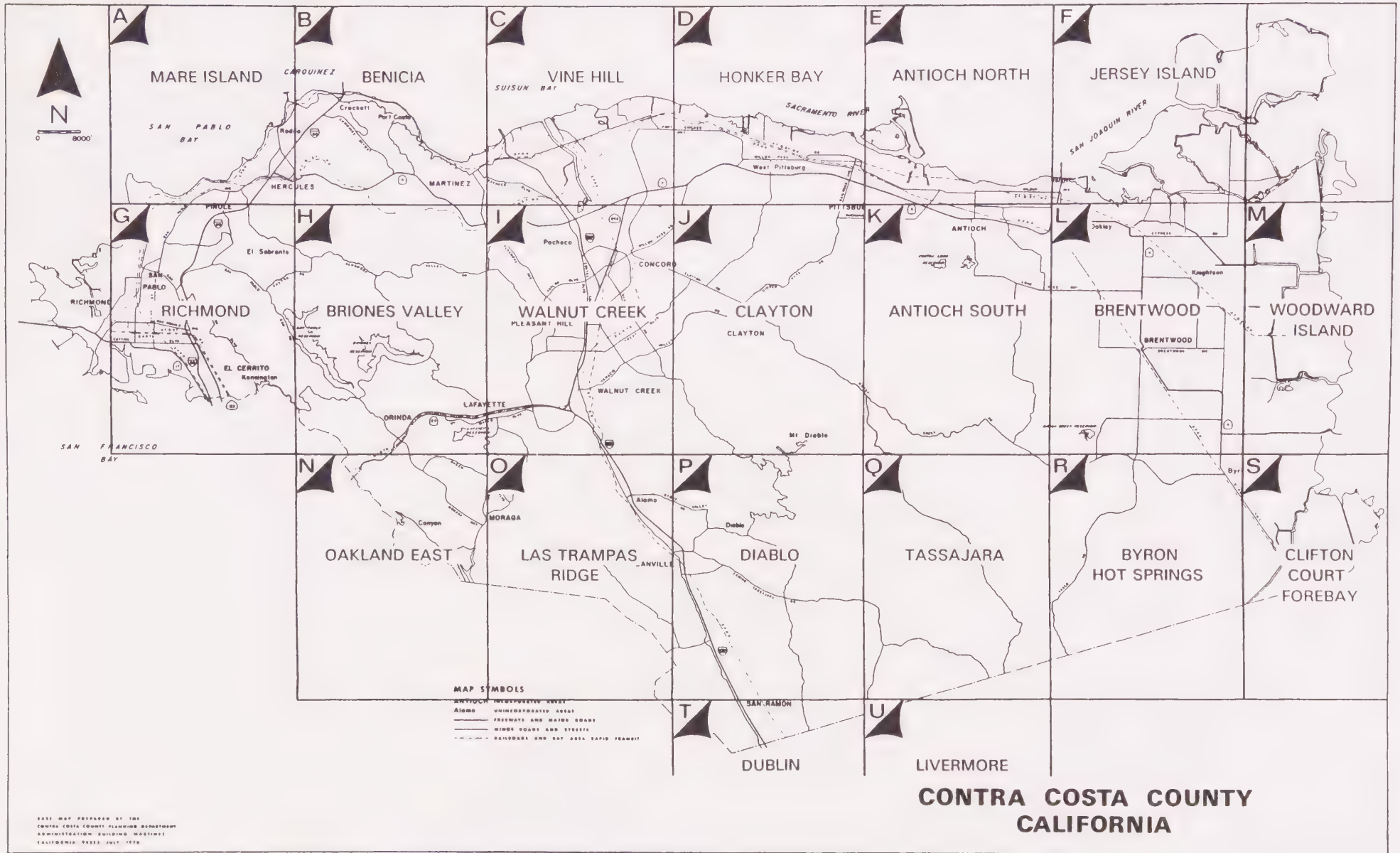
Existing and future CNEL noise contours are provided for Buchanan Field and Byron Airport. These contours were taken from other environmental documents and are reproduced on the full and reduced set of noise contours contained in this document.

## USE OF MAPS/TABLES

Noise contours are typically used for planning purposes in conjunction with new residential development. Since the actual full-size contour maps for roadways and rail lines are not contained in the Noise Element, Table 11-3 has been prepared. These tables and maps are designed to help planners, developers, and consultants identify a parcel or proposed residential project that is potentially impacted by noise. The table is intended to be used as follows:

- Step 1. Determine distance of the project site from a major noise source such as a roadway, airport, or rail line.





### KEY TO 2005 NOISE CONTOUR MAPS

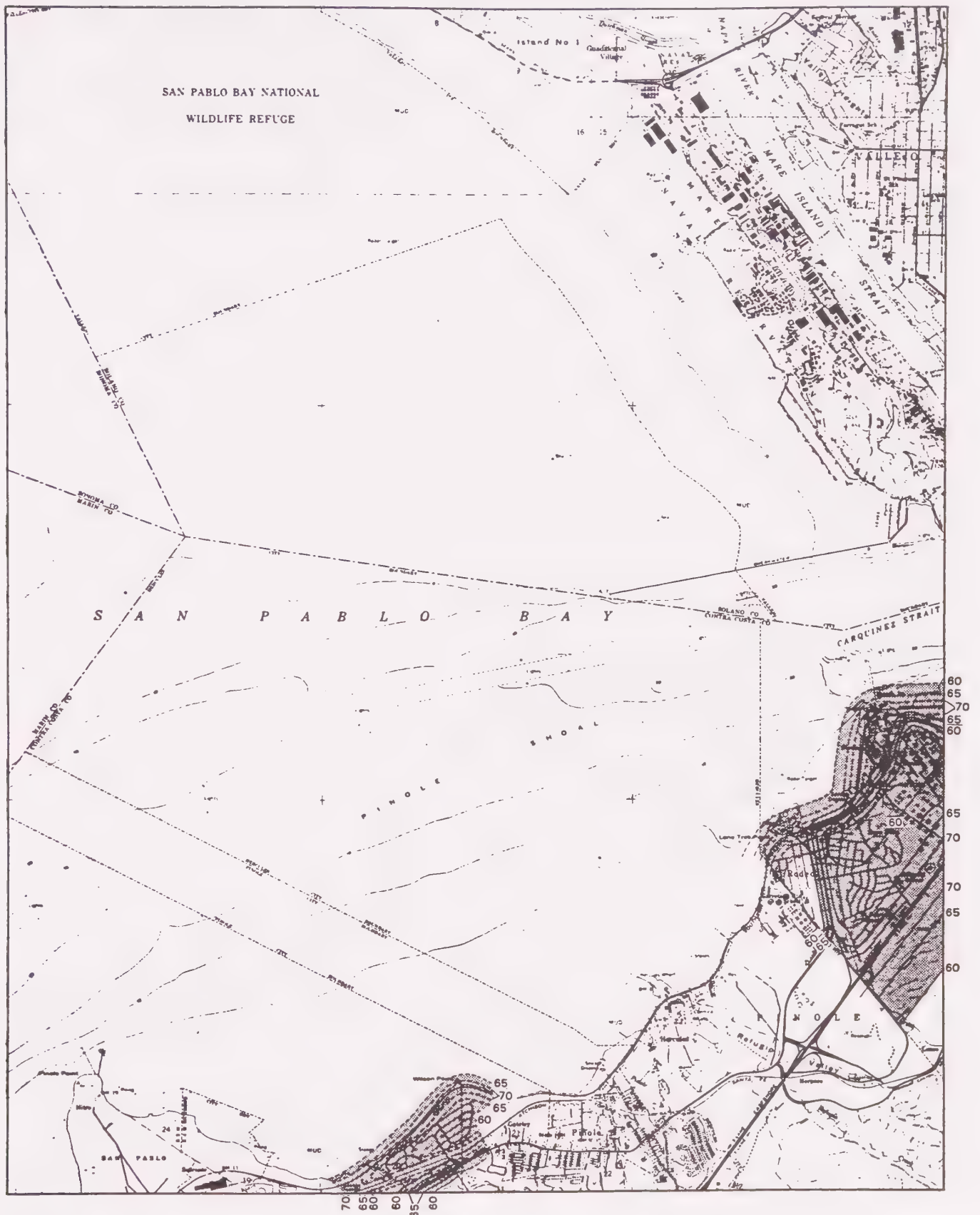
The above key provides a locational guide to the 2005 noise contour maps which appear on the following pages. The maps have been reduced from their original 1" = 2000' scale, and are presented here for illustrative purposes. The full set of 1" = 2000' administrative noise contour maps is available in the Contra Costa County Community Development Department.

Figure 11-5



# Noise Contours

Figure 11-5A



## LEGEND

- 2005 DNL and CNEL NOISE LEVELS (dB)
- Roadways are DNL
- - - - Trains are DNL



1 1/4 0 1 MILE

1000 0 1000 3000 5000 7000 FEET



# Noise Contours

Figure 11-5B



## LEGEND

- 2005 DNL and CNEL NOISE LEVELS (dB)
- Roadways are DNL
- - - - Trains are DNL



1 1/4 0 1 MILE

1000 0 1000 3000 5000 7000 FEET

# Noise Contours

Figure 11-5C



## LEGEND



2005 DNL and CNEL NOISE LEVELS (dB)

— Roadways are DNL

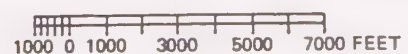
--- Trains are DNL

--- Airports are CNEL



NORTH

Vine Hill





# Noise Contours

Figure 11-5D



## LEGEND



2005 DNL and CNEL NOISE LEVELS (dB)

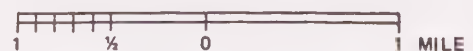
— Roadways are DNL

- - - Trains are DNL



NORTH

Honker Bay








# Noise Contours

Figure 11-5E



## LEGEND

-  2005 DNL and CNEL NOISE LEVELS (dB)
-  Roadways are DNL
-  Trains are DNL



Antioch North



# Noise Contours

Figure 11-5F



## LEGEND



2005 DNL and CNEL NOISE LEVELS (dB)

— Roadways are DNL

- - - Trains are DNL



NORTH

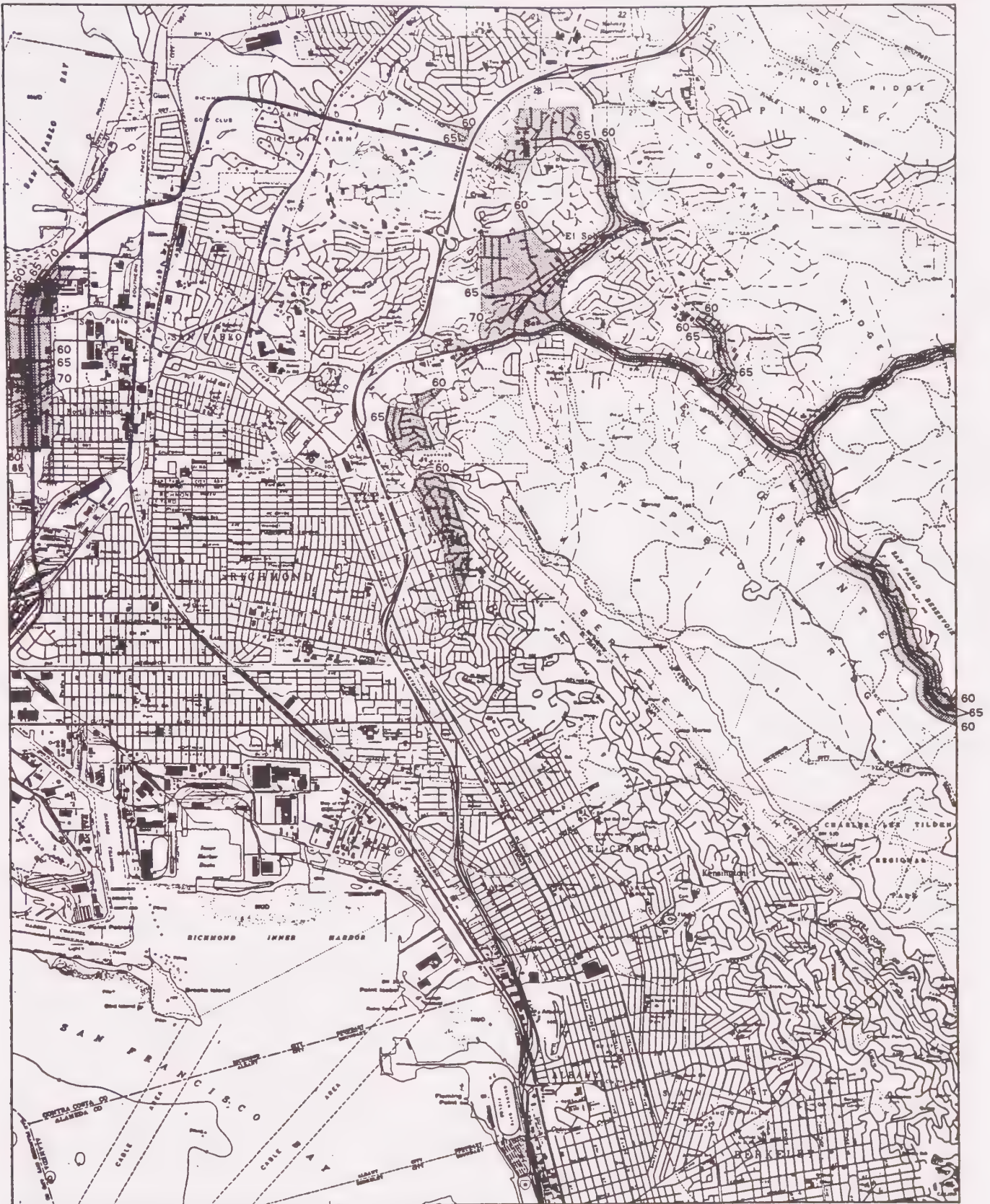
1 1/2 0 1 MILE

1000 0 1000 3000 5000 7000 FEET



# Noise Contours

Figure 11-5G



## LEGEND



2005 DNL and CNEL NOISE LEVELS (dB)

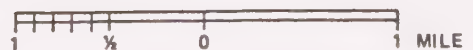
— Roadways are DNL

--- Trains are DNL



NORTH

Richmond





# Noise Contours

Figure 11-5H



## LEGEND



2005 DNL and CNEL NOISE LEVELS (dB)

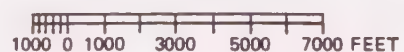
— Roadways are DNL

- - - Trains are DNL



NORTH

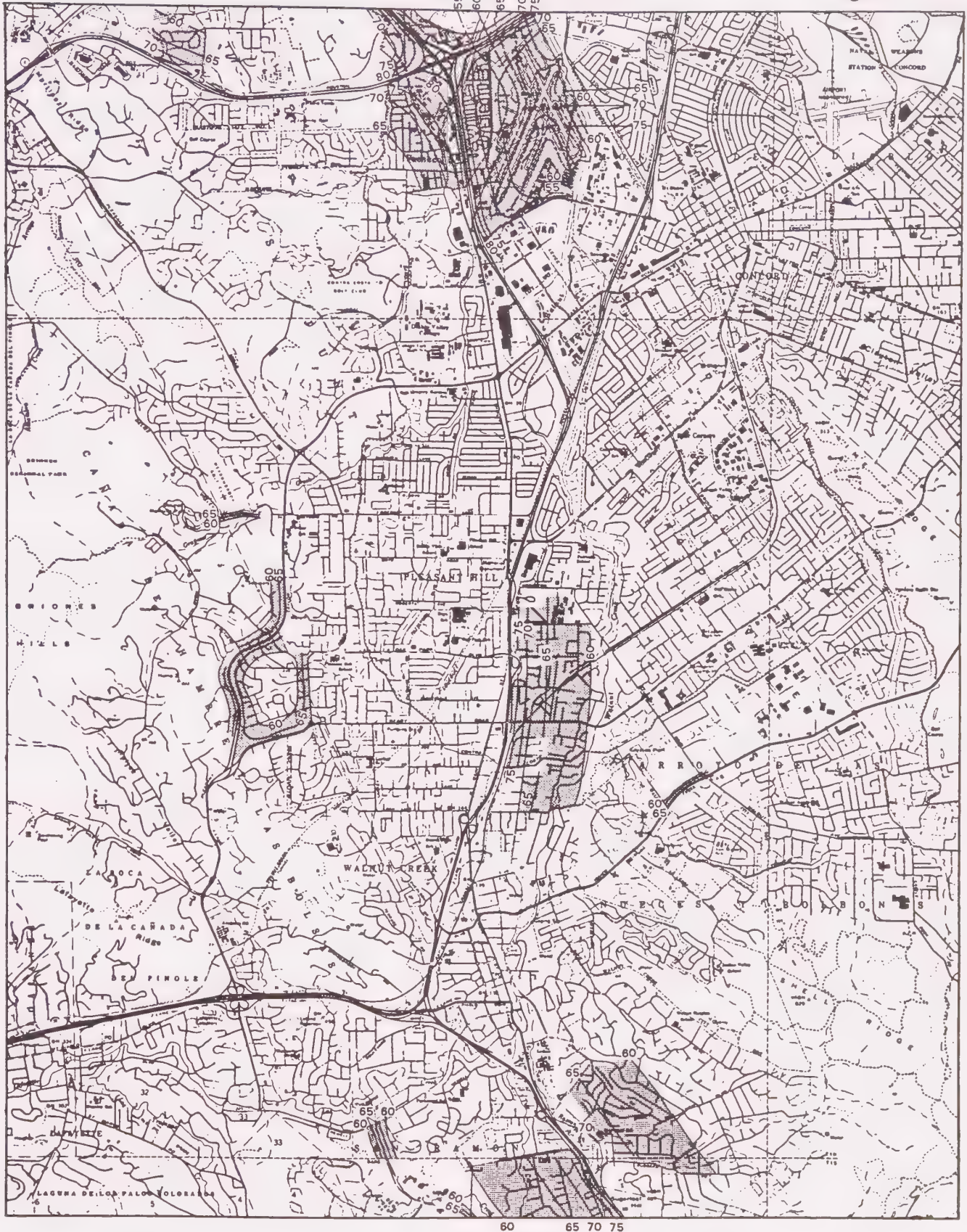
Briones Valley





# Noise Contours

Figure 11-51



## LEGEND



2005 DNL and CNEL NOISE LEVELS (dB)

—— Roadways are DNL

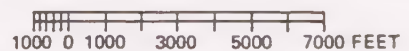
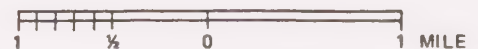
----- Trains are DNL

----- Airports are CNEL



NORTH

Walnut Creek





# Noise Contours

Figure 11-5J



## LEGEND



2005 DNL and CNEL NOISE LEVELS (dB)

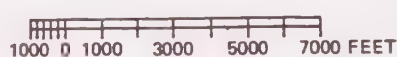
— Roadways are DNL

- - - Trains are DNL



NORTH

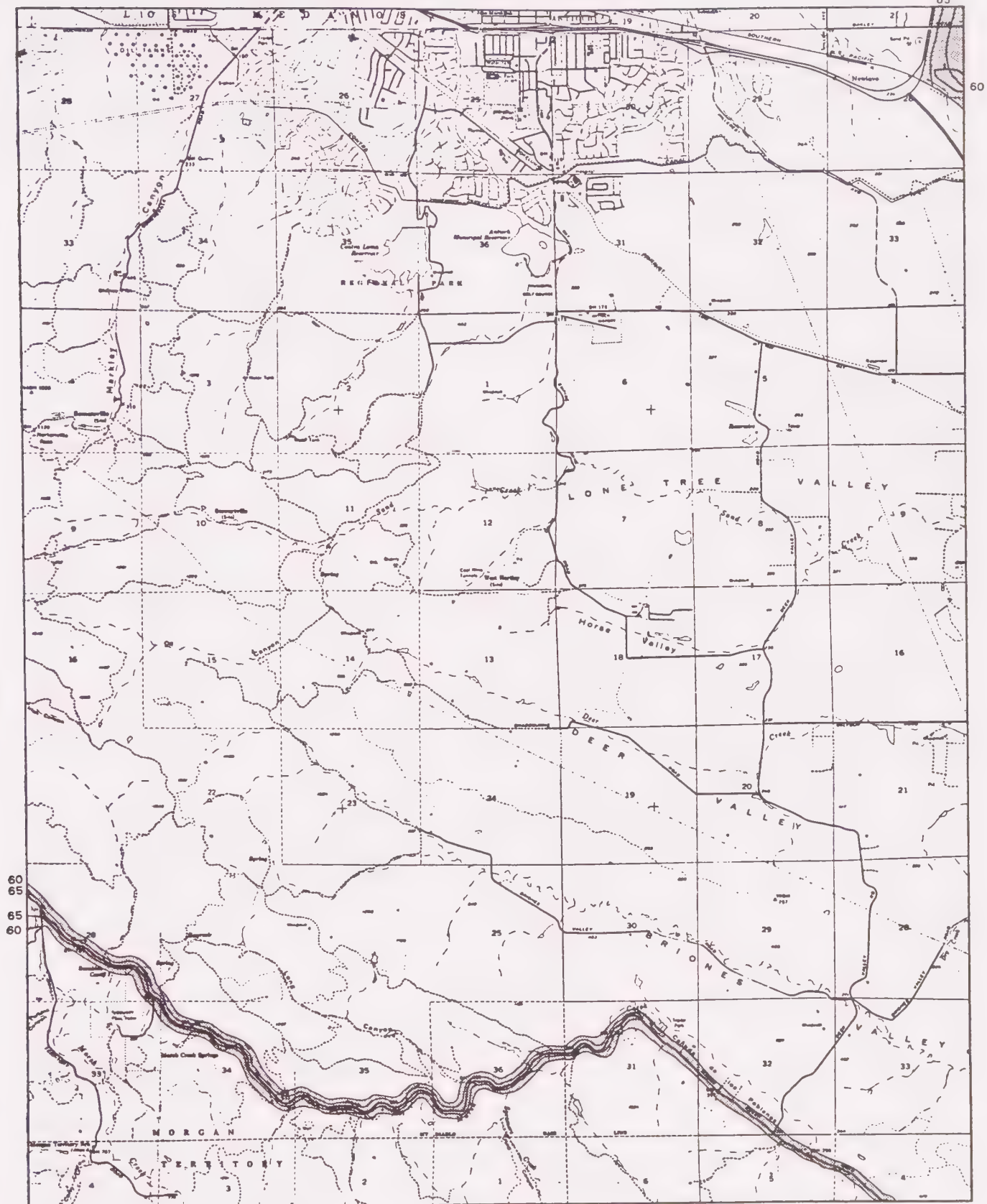
Clayton








# Noise Contours

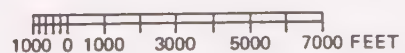
Figure 11-5K



## LEGEND

-  2005 DNL and CNEL NOISE LEVELS (dB)
-  Roadways are DNL
-  Trains are DNL

Antioch South

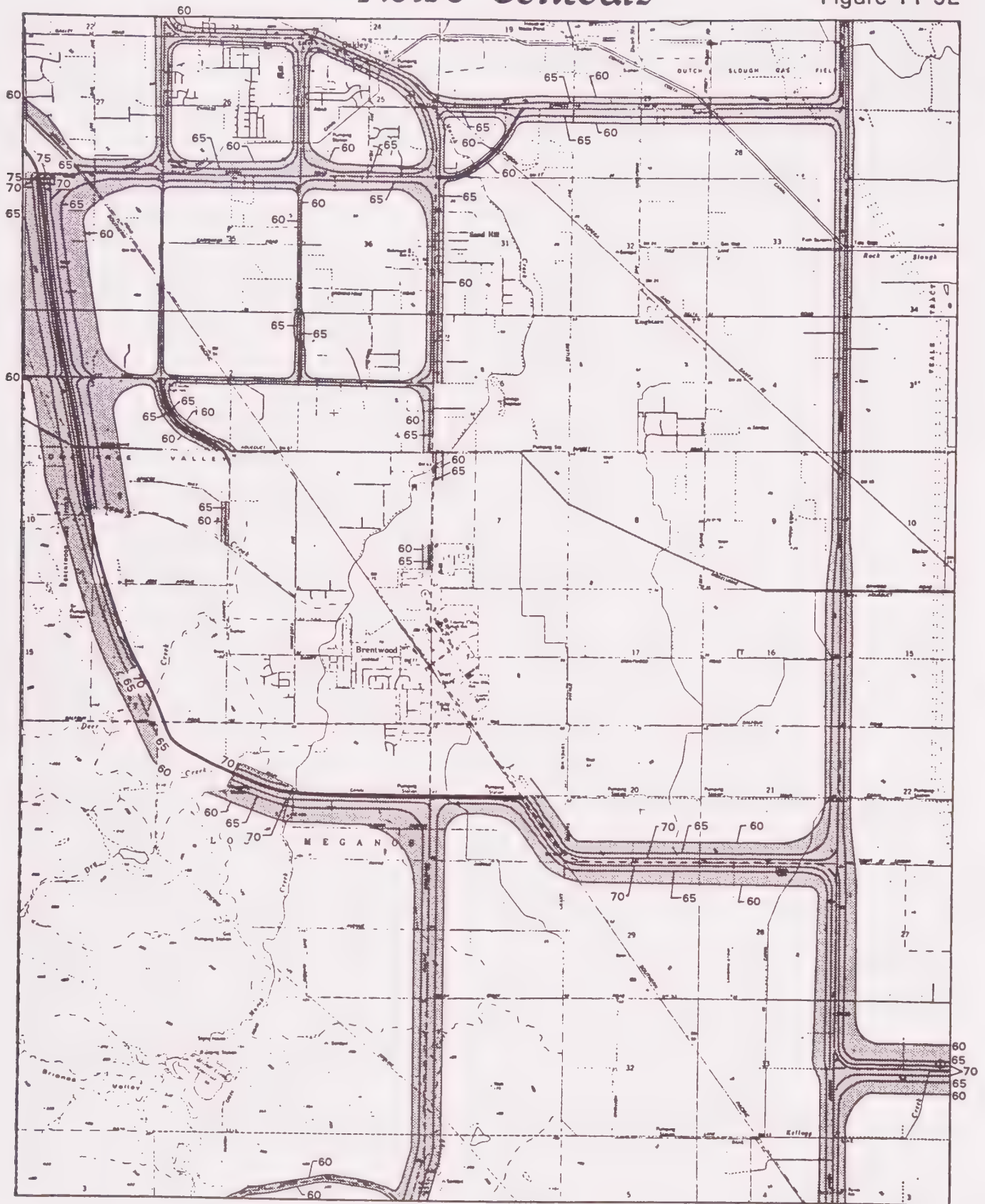


NORTH

11-27

# Noise Contours

Figure 11-5L



## LEGEND



2005 DNL and CNEL NOISE LEVELS (dB)

— Roadways are DNL

--- Trains are DNL



NORTH

Brentwood



1000 0 1000 3000 5000 7000 FEET



# Noise Contours

Figure 11-5M



## LEGEND

- 2005 DNL and CNEL NOISE LEVELS (dB)
- Roadways are DNL
- - - - Trains are DNL



11-29

Woodward Island





# Noise Contours

Figure 11-5N



## LEGEND

Oakland East



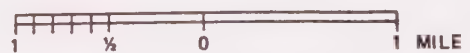
2005 DNL and CNEL NOISE LEVELS (dB)

—— Roadways are DNL

----- Trains are DNL



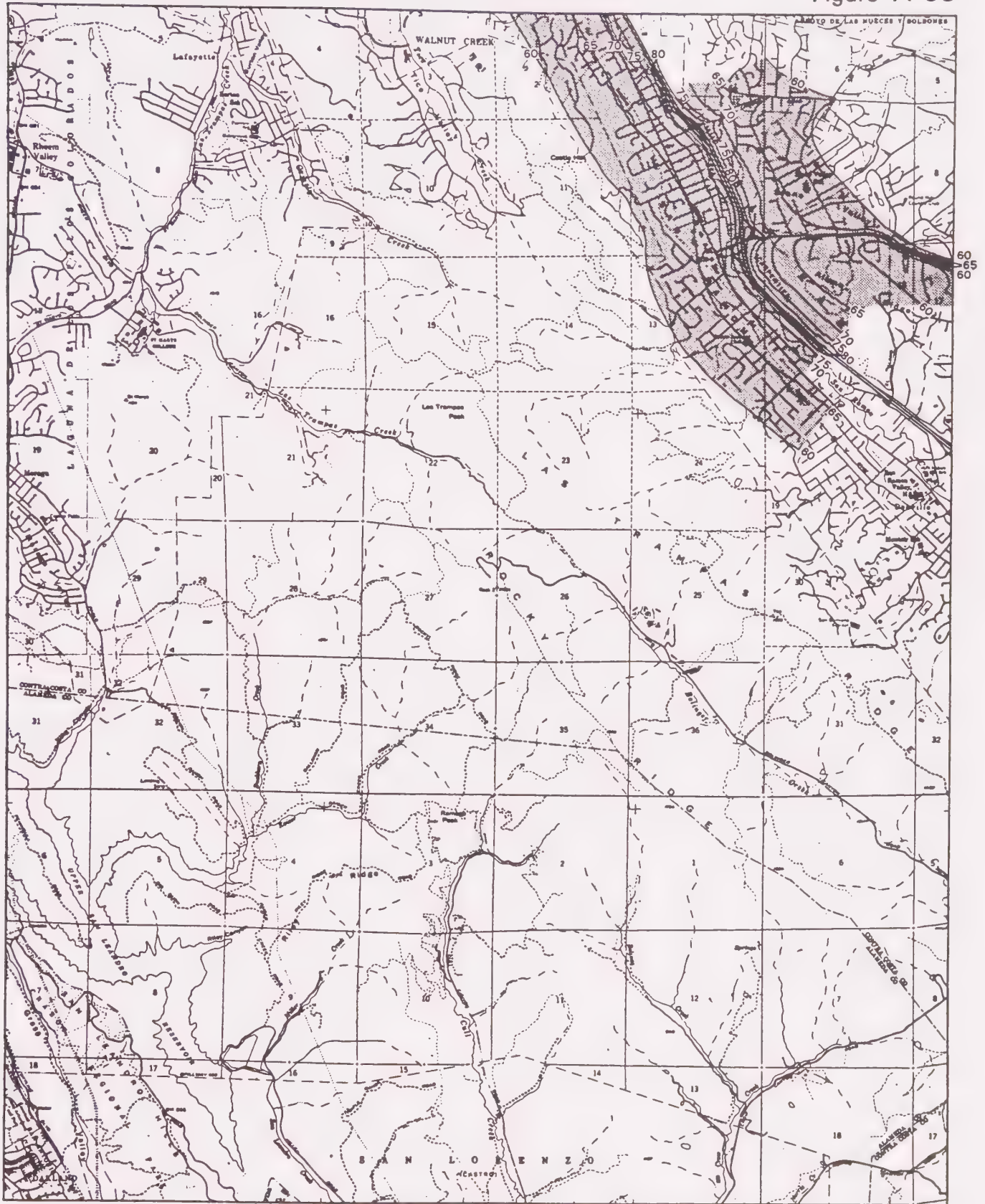
NORTH








# Noise Contours

Figure 11-50



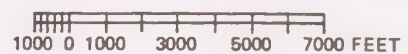
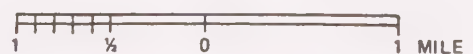
## LEGEND

-  2005 DNL and CNEL NOISE LEVELS (dB)
-  Roadways are DNL
-  Trains are DNL

Las Trampas Ridge

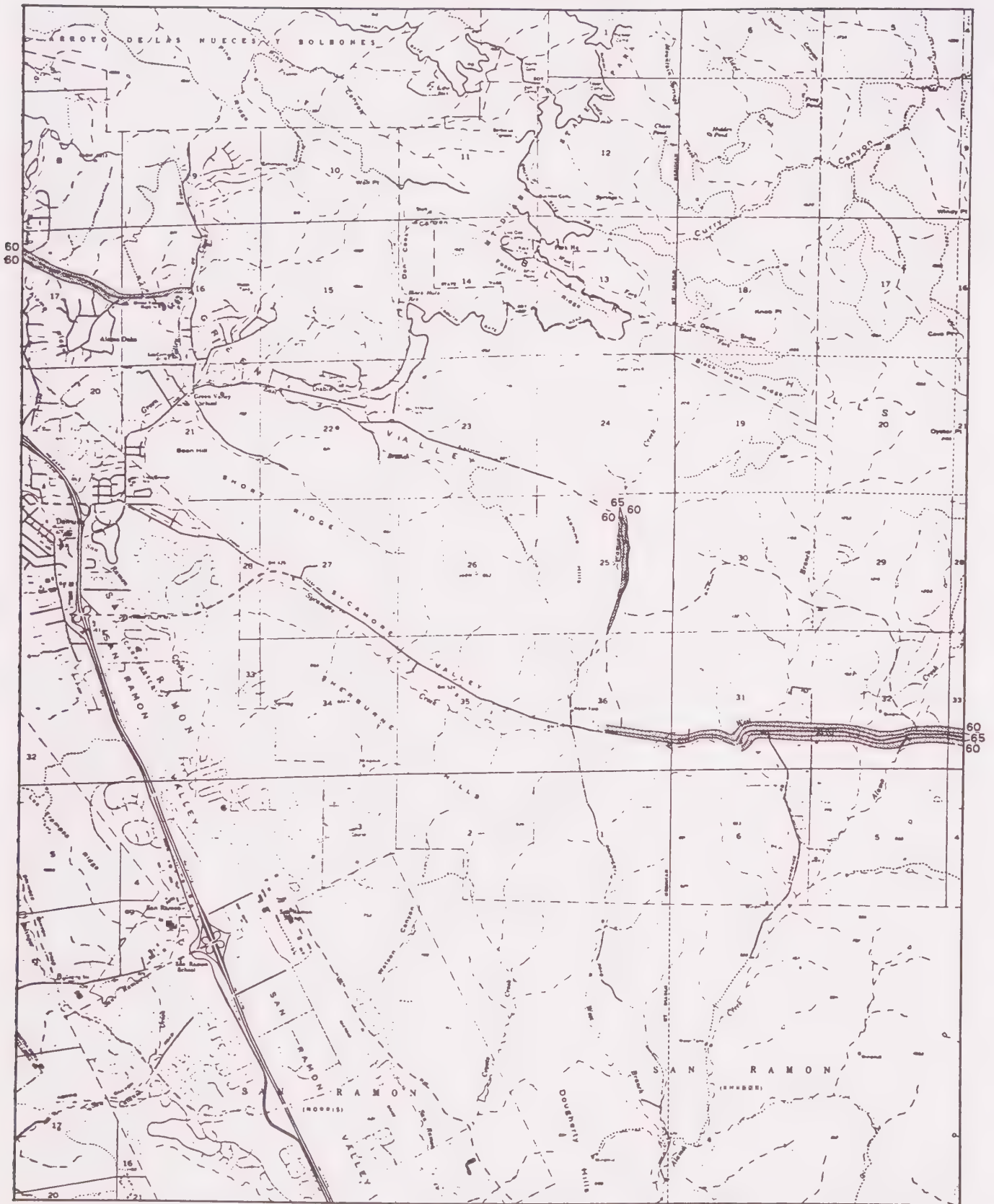


NORTH



# Noise Contours

Figure 11-5P



## LEGEND



2005 DNL and CNEL NOISE LEVELS (dB)

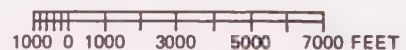
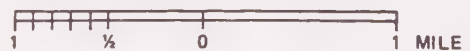
— Roadways are DNL

- - - Trains are DNL



NORTH

Diablo





# Noise Contours

Figure 11-50



## LEGEND



2005 DNL and CNEL NOISE LEVELS (dB)

— Roadways are DNL

--- Trains are DNL



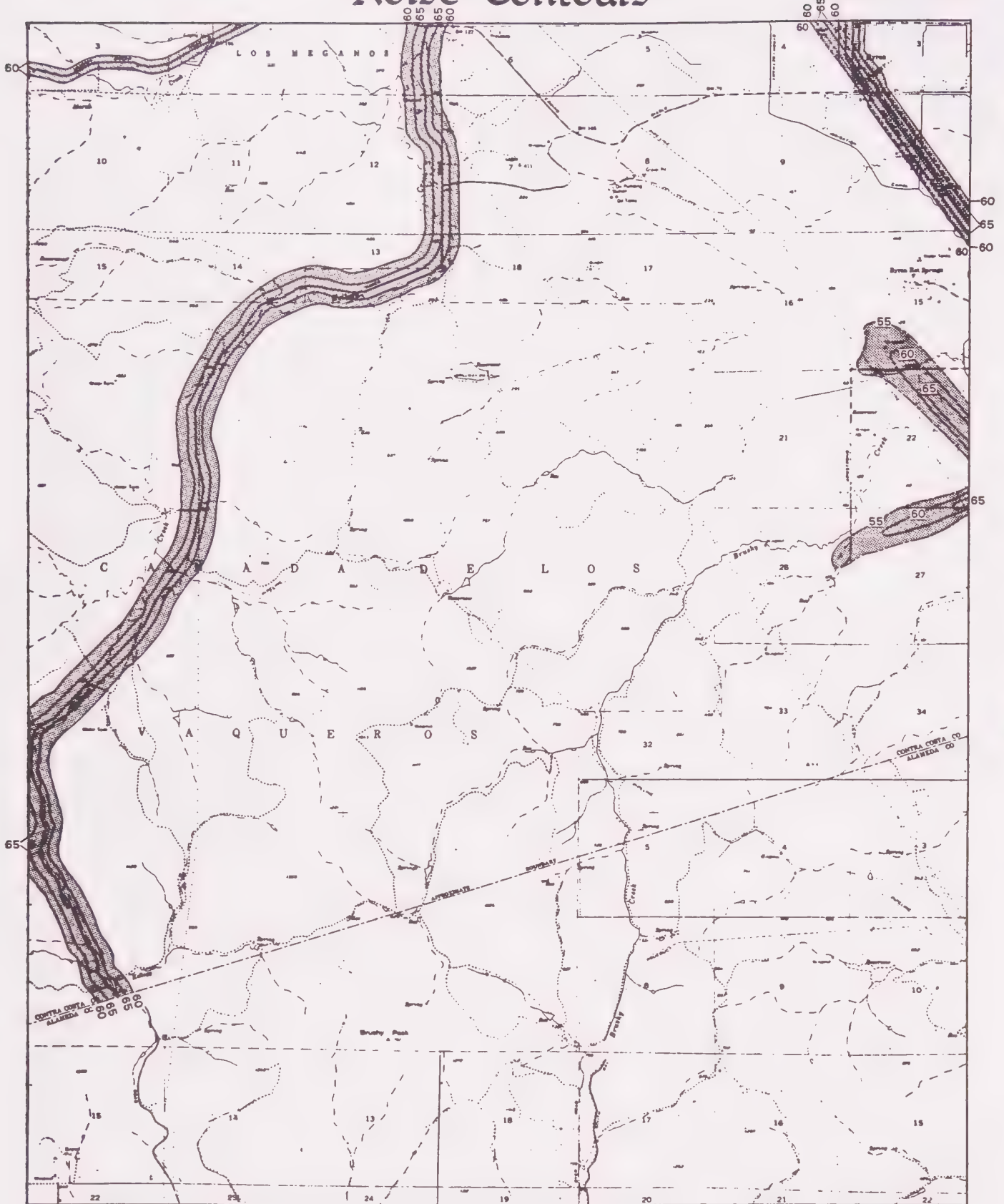
NORTH

Tassajara



# Noise Contours

Figure 11-5R



## LEGEND



2005 DNL and CNEL NOISE LEVELS (dB)

———— Roadways are DNL

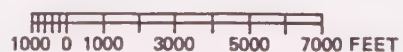
----- Trains are DNL

----- Airports are CNEL



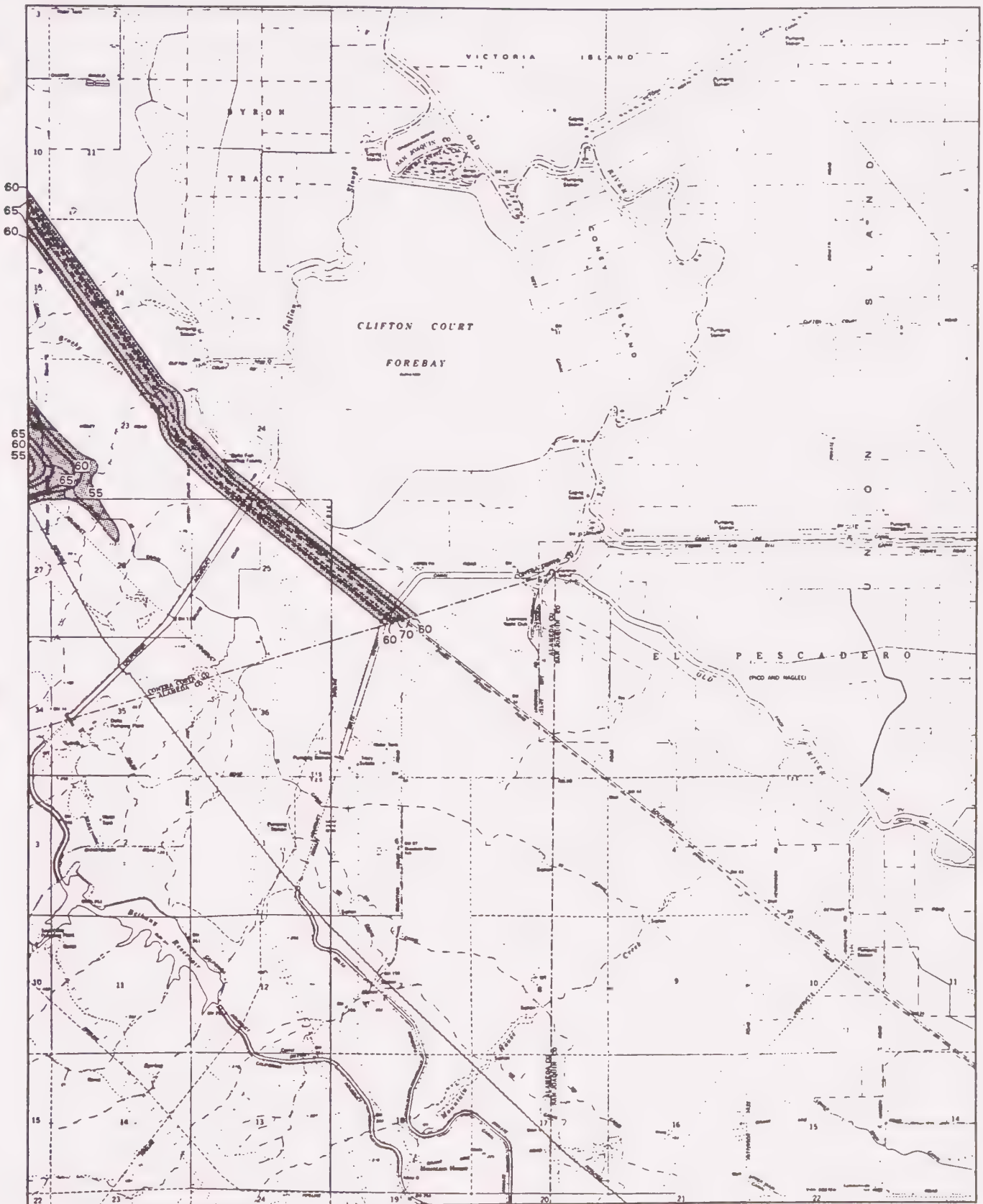
NORTH

Byron Hot Springs



# Noise Contours

Figure 11-55



## LEGEND



2005 DNL and CNEL NOISE LEVELS (dB)

—— Roadways are DNL

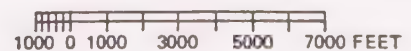
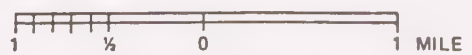
----- Trains are DNL

----- Airports are CNEL



NORTH

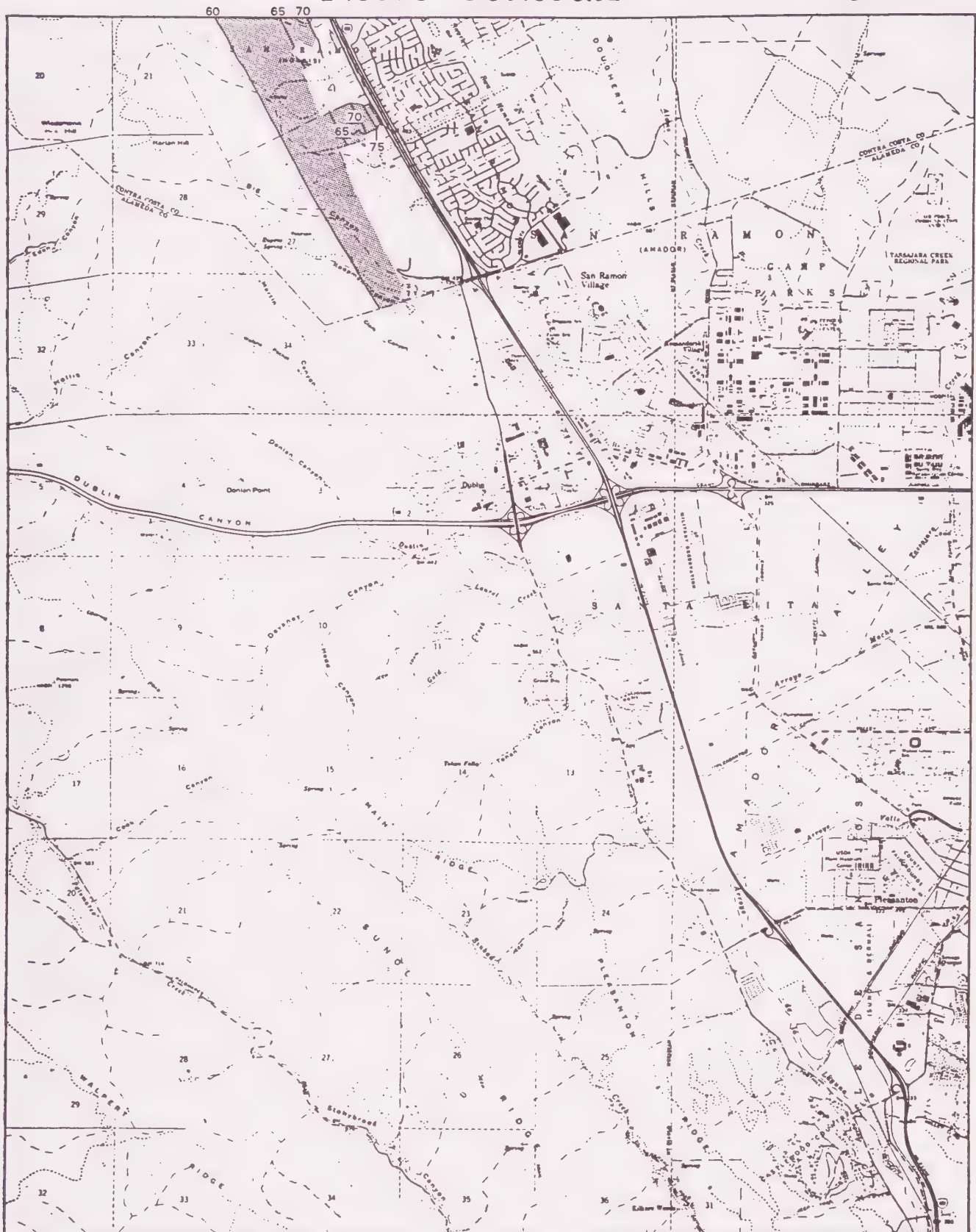
Clifton Court Forebay





# Noise Contours

Figure 11-5T



## LEGEND



2005 DNL and CNEL NOISE LEVELS (dB)

— Roadways are DNL

--- Trains are DNL



NORTH

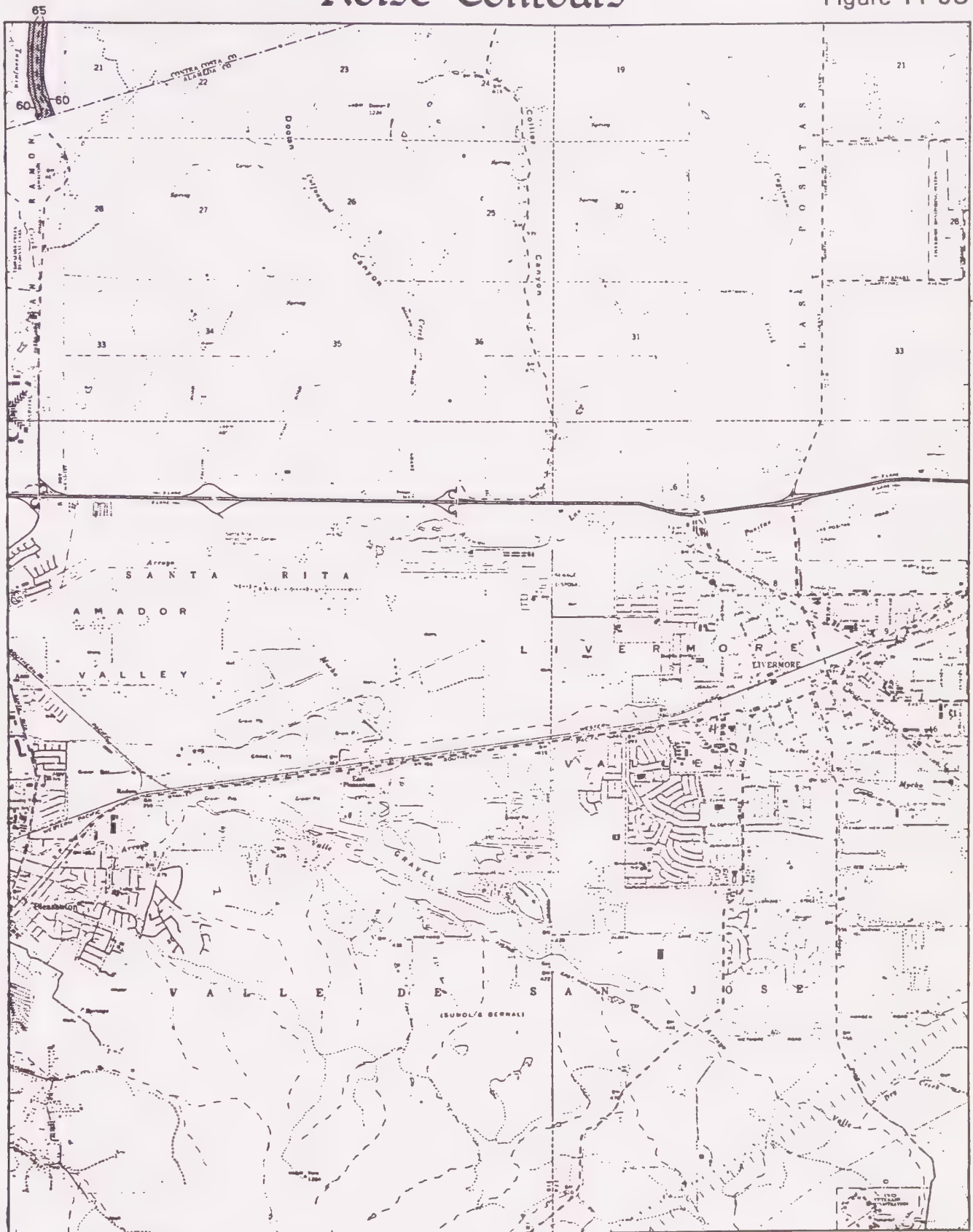
Dublin

1 1/4 0 1 MILE

1000 0 1000 3000 5000 7000 FEET

# Noise Contours

Figure 11-5U



## LEGEND



2005 DNL and CNEL NOISE LEVELS (dB)

— Roadways are DNL

- - - Trains are DNL



NORTH

Livermore

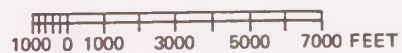


TABLE 11-3  
FUTURE NOISE LEVELS  
ALONG FREEWAYS AND MAJOR ARTERIALS

| <u>Road/Segment</u>                          | <u>DNL at 100 ft.<br/>(dB)</u> | <u>Distance to<br/>60 DNL Contour<br/>(feet)</u> |
|--|--------------------------------|--|
| <b>Appian Way</b>                            |                                |  |
| Route 80 to Valley View Road                 | 65                             | 270  |
| Valley View Road to San Pablo Dam Road       | 66                             | 320  |
| <b>Bethel Island Road</b>                    |                                |  |
| Cypress Road to Gateway Road                 | 67                             | 370  |
| <b>Bollinger Canyon Road</b>                 | 70                             | 620  |
| <b>Byron Highway (J4)</b>                    |                                |  |
| Cypress Road to Orwood Road                  | 65                             | 270  |
| Orwood Road to Payne Avenue                  | 67                             | 370  |
| Payne Avenue to Route 4                      | 70                             | 590  |
| <b>Camino Diablo Road</b>                    |                                |  |
| Marsh Creek Road to Byron Highway            | 60                             | 100  |
| <b>Clayton Road</b>                          |                                |  |
| Kirker Pass Road to Marsh Creek Road         | 66                             | 320  |
| <b>Crow Canyon Road</b>                      |                                |  |
| Alameda County Line to Bollinger Canyon road | 73                             | 930  |
| <b>Cummings Skyway</b>                       |                                |  |
| Route 80 to Route 4                          | 65                             | 270  |
| <b>Cypress Road</b>                          |                                |  |
| Route 4 to Laurel Road                       | 66                             | 320  |
| Laurel Road to Sellers Avenue                | 69                             | 500  |
| Sellers Avenue to Bethel Island Road         | 67                             | 370  |
| <b>Danville Boulevard</b>                    |                                |  |
| Rudgear Road to Stone Valley Road            | 62                             | 160  |
| Stone Valley Road to El Portal               | 60                             | 100  |
| <b>Delta Expressway</b>                      |                                |  |
| Route 4 to Laurel Road                       | 77                             | 1,700  |
| Laurel Road to San Creek Boulevard           | 76                             | 930  |
| Sand Creek Boulevard to Walnut Boulevard     | 74                             | 1,100  |
| Walnut Boulevard to East                     | 71                             | 680  |



TABLE 11-3 (Continued)

| <u>Road/Segment</u>                      | <u>DNL at 100 ft.</u><br><u>(dB)</u> | <u>Distance to</u><br><u>60 DNL Contour</u><br><u>(feet)</u> |
|--|--------------------------------------|--|
| Dougherty Road (Realigned)               | 80                                   | 410  |
| Gateway Boulevard                        |                                      |  |
| Near Route 24                            | 68                                   | 430  |
| Near Moraga Way                          | 67                                   | 370  |
| Kirker Pass Road                         |                                      |  |
| Concord Boulevard to Railroad Avenue     | 73                                   | 930  |
| Laurel Road                              |                                      |  |
| Delta Expressway to O'Hara Avenue        | 69                                   | 500  |
| O'Hara Avenue to Route 4                 | 68                                   | 430  |
| Route 4 to Cypress Road                  | 64                                   | 230  |
| Marsh Creek Road                         |                                      |  |
| Clayton to Deer Valley Road              | 65                                   | 270  |
| Deer Valley Road to Camino Diablo Road   | 64                                   | 230  |
| Camino Diablo Road to East               | 63                                   | 200  |
| Lone Tree Way                            |                                      |  |
| Empire Mine Road to O'Hara Avenue        | 68                                   | 430  |
| O'Hara Avenue to Route 4                 | 60                                   | 100  |
| Pacheco Boulevard                        |                                      |  |
| Pine Street to Morello Avenue            | 61                                   | 130  |
| Morello Avenue to Route 4                | 65                                   | 270  |
| Route 4 to Concord Avenue                | 66                                   | 320  |
| Pleasant Hill Road                       |                                      |  |
| Reliez Valley Road to Oak Park Boulevard | 69                                   | 500  |
| Port Chicago Highway                     |                                      |  |
| Pacifica Avenue to Willow Pass Road      | 64                                   | 230  |
| Richmond Parkway                         | 72                                   | 800  |
| San Pablo Avenue                         |                                      |  |
| Route 80 to Rodeo                        | 67                                   | 370  |
| Pinole to Richmond                       | 63                                   | 200  |
| San Pablo Dam Road                       |                                      |  |
| San Pablo Avenue to Appian Way           | 70                                   | 590  |
| Appian Way to Valley View Road           | 63                                   | 200  |
| Valley View road to Castro Ranch Road    | 64                                   | 230  |
| Castro Ranch Road to Bear Creek Road     | 67                                   | 370  |

TABLE 11-3 (Continued)

| <u>Road/Segment</u>                                  | <u>DNL at 100 ft.<br/>(dB)</u> | <u>Distance to<br/>60 DNL Contour<br/>(feet)</u> |
|--|--------------------------------|--|
| <b>Stone Valley Road</b>                             |                                |  |
| Route 680 to Miranda Avenue                          | 62                             | 160  |
| Miranda Avenue to Green Valley Road                  | 61                             | 130  |
| <b>Camino Tassajara Road</b>                         |                                |  |
| Black Hawk Road to Finley Road                       | 67                             | 370  |
| Finley Road to Alameda County Line                   | 66                             | 320  |
| <b>Taylor Boulevard</b>                              |                                |  |
| Pleasant Hill Road South to Pleasant Hill Road North | 68                             | 430  |
| <b>Vasco Road</b>                                    |                                |  |
| Camino Diablo Road to Alameda County Line            | 71                             | 680  |
| <b>Willow Pass Road</b>                              |                                |  |
| Route 4 to Pittsburg                                 | 65                             | 270  |
| <b>Windemere Parkway</b>                             | 65                             | 210  |
| <b>Ygnacio Valley Boulevard</b>                      |                                |  |
| Walnut Creek to Clayton Road                         | 70                             | 590  |
| <b>Route 4</b>                                       |                                |  |
| Route 80 to Cummings Skyway                          | 72                             | 800  |
| Cummings Skyway to McEwen Road                       | 73                             | 930  |
| McEwen Road to Alhambra Avenue                       | 74                             | 1,100  |
| Alhambra Avenue to Morello Avenue                    | 75                             | 1,300  |
| Morello Avenue to Solano Way                         | 77                             | 1,700  |
| Solano Way to Route 242                              | 78                             | 2,000  |
| Route 242 to Port Chicago Highway                    | 77                             | 1,700  |
| Port Chicago Highway to Railroad Avenue              | 78                             | 2,000  |
| Lone Tree Way North to Route 160                     | 72                             | 800  |
| Route 160 to Oakley Road                             | 67                             | 370  |
| Oakley Road to Cypress Road                          | 66                             | 320  |
| Cypress Road to Lone Tree Way East                   | 65                             | 270  |
| Lone Tree Way East to Brentwood Road                 | 67                             | 370  |
| Brentwood Road to Sellers Avenue                     | 60                             | 100  |
| Sellers Avenue to Byron Highway                      | 72                             | 800  |
| Byron Highway to San Joaquin County Line             | 73                             | 930  |
| <b>Route 24</b>                                      |                                |  |
| Alameda County Line to Orinda                        | 78                             | 2,000  |
| <b>Route 80</b>                                      |                                |  |
| Solano County to Willow Avenue                       | 79                             | 2,300  |

TABLE 11-3 (Continued)

| <u>Road/Segment</u>                     | <u>DNL at 100 ft.</u><br><u>(dB)</u> | <u>Distance to</u><br><u>60 DNL Contour</u><br><u>(feet)</u> |
|---|--------------------------------------|--|
| <b>Route 160</b>                        |                                      |  |
| Route 4 to Solano County Line           | 70                                   | 425  |
| <b>Route 680</b>                        |                                      |  |
| Solano County Line to Pacheco Boulevard | 81                                   | 3,200  |
| Pacheco Boulevard to Highway 4          | 82                                   | 3,700  |
| Highway 4 to Concord Avenue             | 81                                   | 3,200  |
| Oak Park Boulevard to Route 24          | 81                                   | 3,200  |
| Route 24 to Alcosta Boulevard           | 82                                   | 3,700  |
| <b>Atcheson, Topeka and Santa Fe</b>    | 73                                   | 650  |
| <b>Southern Pacific</b>                 |                                      |  |
| Tracy-Martinez                          | 70                                   | 425  |
| Martinez-Pinole                         | 77                                   | 1,050  |
| Pinole-Richmond                         | 76                                   | 930  |
| <b>BART</b>                             |                                      |  |
| Aerial                                  | 68                                   | 650  |
| At-Grade                                | 63                                   | 200  |



- Step 2.** If the noise source is a roadway or rail line: from Table 11-3, determine the distance from the rail line or roadway centerline to the future 60 DNL contour.
- If the noise source is an airport, determine if the project is within the 60 CNEL contour.
- Step 3.** If the project is within the future 60 DNL or CNEL contour, an acoustical study should be initiated.

Noise contours do not always account for the acoustical shielding provided by site geometry or terrain. Therefore, these contours may overestimate the noise exposure of a particular site. However, noise contours should only be used as a screening tool. Site-specific noise levels and other acoustical issues should be addressed in the acoustical study for the project.

## **11.8 GOALS**

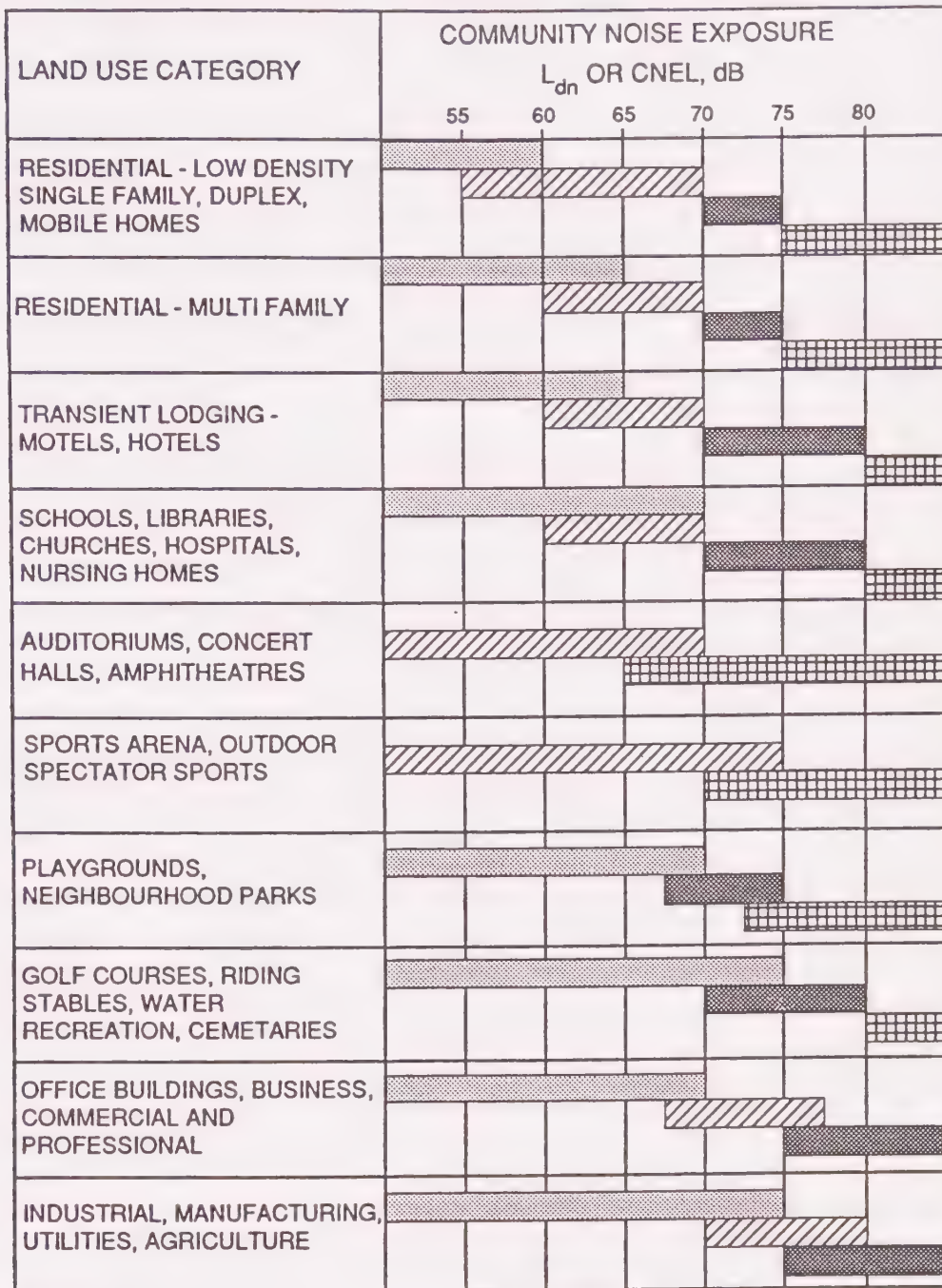
- 11-A** To improve the overall environment in the County by reducing annoying and physically harmful levels of noise for existing and future residents and for all land uses.
- 11-B** To maintain appropriate noise conditions in all areas of the County.
- 11-C** To ensure that new developments will be constructed so as to limit the effects of exterior noise on the residents.
- 11-D** To recognize the economic impacts of noise control and encourage an equitable distribution of these costs.
- 11-E** To recognize citizen concerns regarding excessive noise levels, and to utilize measures through which the concerns can be identified and mitigated.

## **11.9 POLICIES**

- 11-1** New projects shall be required to meet acceptable exterior noise level standards as established in the Noise and Land Use Compatibility Guidelines contained in Figure 11-6. These guidelines, along with the future noise levels shown in the future noise contours

Figure 11-6

## LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS

**NORMALLY ACCEPTABLE**

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

**CONDITIONALLY ACCEPTABLE**

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.

**NORMALLY UNACCEPTABLE**

New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

**CLEARLY UNACCEPTABLE**

New construction or development clearly should not be undertaken.

For lands within 3 miles of Buchanan Field and the East Contra Costa County Airports noise compatibility shall be adjusted to those of the ALUC which are roughly 5 CNEL lower than shown on this table.

maps, should be used by the County as a guide for evaluating the compatibility of "noise-sensitive" projects in potentially noisy areas.

- 11-2 The standard for outdoor noise levels in residential areas is a DNL of 60 dB. However, a DNL of 60 dB or less may not be achievable in all residential areas due to economic or aesthetic constraints. One example is small balconies associated with multi-family housing. In this case, second and third story balconies may be difficult to control to the goal. A common outdoor use area that meets the goal can be provided as an alternative.
- 11-3 If the primary noise source is train passbys, then the standard for outdoor noise levels in residential areas is a DNL of 70 dB. A higher DNL is allowable since the DNL is controlled by a relatively few number of train passbys that are disruptive outdoors only for short periods. Even though the DNL may be high, during the majority of the time the noise level will be acceptable.
- 11-4 Title 24, Part 2, of the California Code of Regulations requires that new multiple-family housing projects, hotels, and motels exposed to a DNL of 60 dB or greater have a detailed acoustical analysis describing how the project will provide an interior DNL of 45 dB or less. The County also shall require new single-family housing projects to provide for an interior DNL of 45 dB or less.
- 11-5 In developing residential areas exposed to a DNL in excess of 65 dB due to single events such as airport, helicopter, or train operations, indoor noise levels due to these single events shall not exceed a maximum A-weighted noise level of 50 dB in bedrooms and 55 dB in other habitable rooms.
- 11-6 If an area is currently below the maximum "normally acceptable" noise level, an increase in noise up to the maximum should not be allowed necessarily.
- 11-7 Public projects shall be designed and constructed to minimize long-term noise impacts on existing residents.
- 11-8 Construction activities shall be concentrated during the hours of the day that are not noise-sensitive for adjacent land uses and should be commissioned to occur during normal work hours of the day to provide relative quiet during the more sensitive evening and early morning periods.



- 11-9 Sensitive land use shall be encouraged to be located away from noise areas, or the impacts of noise on these uses shall be mitigated. If residential areas are planned adjacent to industrial noise sources, then a noise study shall be performed to determine the extent of any noise impacts and recommend appropriate noise mitigation measures.
- 11-10 Development located within 6,000 feet of the Camp Parks Reserve Forces Training Area shall be required to prepare a detailed acoustical analysis. The analysis shall determine if the project will be affected severely by noise and, if so, what noise mitigation measures are available.
- 11-11 Noise impacts upon the natural environment, including impacts on wildlife, shall be evaluated and considered in review of development projects.

#### 11.10 IMPLEMENTATION MEASURES

##### DEVELOPMENT REVIEW

- 11-a Continue to require a review and analysis of noise-related impacts as part of the existing project development review procedures of the County.
- 11-b Evaluate the noise impacts of a proposed project upon existing land uses in terms of the applicable Federal, State, and local codes, and the potential for adverse community response, based on a significant increase in existing noise levels.
- 11-c Encourage use of the following mitigation measures to minimize noise impacts of proposed development projects:
- 1) Site planning. Proper site planning is the first mitigation measure that should be investigated to reduce noise impacts. By taking advantage of the natural shape and terrain of a site, it often is possible to arrange the buildings and other uses in a manner that will reduce and possibly eliminate noise impact. Specific site planning techniques include:
    - a) Increasing the distance between the noise source and the receiver;
    - b) Placing non-noise-sensitive land uses such as parking lots, maintenance facilities, and utility areas between the source and the receiver;

- c) Using non-noise-sensitive structures such as garages to shield noise-sensitive areas; and
  - d) Orienting buildings to shield outdoor spaces from a noise source.
- 2) Architectural layout of buildings. In many cases, noise reduction can be attained by careful layout of noise-sensitive spaces. Bedrooms, for example, should be placed away from freeways. Quiet outdoor spaces can be provided next to a noisy highway by creating a U-shaped development which faces away from the highway.
- 3) Noise Barriers: Noise barriers or walls are commonly used to reduce noise levels from ground transportation noise sources and industrial sources. While serving a dual purpose in that they can reduce noise level both outdoors and indoors, to be effective, a barrier must interrupt the line of sight between the noise source and the receiver. A barrier should provide at least 5 dB of noise reduction to achieve a noticeable change in noise levels.
- 4) Construction modifications: If site planning, architectural layout, noise barriers, or a combination of these measures does not achieve the required noise reduction, then construction modification to walls, roofs, ceilings, doors, windows, and other penetrations may be necessary.

#### CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) GUIDELINES

- 11-d Amend the County CEQA Guidelines to define projects that have the potential to increase long-term noise levels above the levels specified in the policy section of this Plan as generating a significant impact on the environment.
- 11-e Noise mitigation features shall be incorporated into the design and construction of new projects or be required as conditions of project approval.

#### ZONING AND OTHER ORDINANCE AMENDMENTS

- 11-f Adopt a noise ordinance as the method to regulate noise from sources other than transportation sources. The noise ordinance should include specific noise level limits for stationary sources (i.e., projects). These noise level limits should take into account the type of adjacent land use (i.e.,

residential, commercial, or industrial). The State of California Office of Noise Control has published a Model Community Noise Ordinance.

#### OTHER PROGRAMS

- 11-g Coordinate efforts among the County, the cities, BART, the State government, and other agencies to develop a multi-phased action program to mitigate noise impacts.
- 11-h Prepare and adopt a noise abatement program that is consistent with State and federal guidelines, legally valid, and cost-effective.

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1. James Gallagher, Occupational Health Department, Contra Costa County, Personal Communication, July 30, 1990.











## **12. GLOSSARY AND ABBREVIATIONS**

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## 12. GLOSSARY AND ABBREVIATIONS

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### 12.1 GLOSSARY

**ACTIVE FAULT:** A fault that has moved recently and which is likely to move again. For planning purposes, an "active fault" is usually defined as one that shows movement within the last 11,000 years and can be expected to move within the next 100 years.

**A-WEIGHTED SOUND LEVEL (dBA):** The sound level measured on an instrument containing an "A" Filter, which electronically simulates the frequency response of the human ear under an average intensity of sound.

**ADVERSE:** A term used to describe unfavorable, harmful, or detrimental environmental condition changes.

**AMBIENT NOISE:** The background noise associated with a given environment, being usually a composite of sounds from many sources near and far.

**AQUIFER:** A natural underground formation that is saturated with water, and from which water can be withdrawn.

**AREA EMPLOYMENT:** The number of jobs provided in one area, including self-employment jobs. Such jobs can be filled by residents of the subject area or persons commuting from another area of residence.

**ASSESSMENT:** Determination of the nature, amount, importance, or value of an environmental condition change.

**ASSIGNABLE SQUARE FEET (ASF):** A physical planning term referring to the amount of floor space in a building that is usable by programs. ASF does not include hallways, bathrooms, or floor space used by heating, ventilating, and air conditioning equipment.

**AVERAGE DAILY TRAFFIC:** The number of vehicles passing a given point on a road going in a given direction during a 24-hour period.

**BACKGROUND GROWTH:** Anticipated residential growth within the region under study independent of project-related growth.

**BACKGROUND NOISE:** See Ambient Noise.

**BASELINE:** The existing environmental condition plus Category 1 - Approved Development in the absence of project development.

**BASE YEAR:** For the purpose of this DEIR, base year is 1985.





**CLAYPAN:** A layer of fine grained-soil with very low permeability.

**CLEAN FILL:** Dirt or similar material used to cover solid wastes at a landfill activity.

**COMMUNITY NOISE EQUIVALENT LEVEL (CNEL):** The CNEL represents the average continuous noise level over a 24-hour period, with special weighting factors applied to noise events during the night time (10 p.m. to 7 a.m.), the evening (7 p.m. to 10 p.m.), and the daytime (7 a.m. to 7 p.m.).

**COMPACTED VOLUME:** The volume of solid wastes after compaction by collection trucks, as opposed to the loose, or uncompacted volume of wastes in dumpsters.

**CRITERION:** A standard, rule, or test by which a judgment can be formed.

**CRITICAL FACILITY:** Includes facilities housing or serving many people or otherwise posing unusual hazards in case of damage from or malfunction during an earthquake, such as hospitals, fire, police, and emergency service facilities, utility "lifeline" facilities, such as water, electricity, and gas supply, sewage disposal, and communications and transportation facilities.

**CUMULATIVE IMPACT:** Environmental impact of the project under study plus background growth.

**DAY-NIGHT AVERAGE SOUND LEVEL ( $L_{dn}$ ):** The A-weighted average sound level in decibels during a 24-hour period with a 10 dB weighting applied to nighttime sound levels (10 p.m. to 7 a.m.). This exposure method is similar to the CNEL, but deletes the evening time period (7 p.m. to 10 p.m.) as a separate factor.

**DECIBEL:** A unit for expressing the relative intensity (loudness) of sounds. The decibel is the logarithm of the ratio of the intensity of a given sound to the faintest sound discernible by the human ear.

**DEGRADATION:** The reduction of environmental quality in an area through a lessening of diversity, the creation of growth anomalies, or the supplanting of native species by non-native plant and animal species.

**DESIGN CAPACITY:** The capacity at which a water distribution pipe, pump or reservoir, or a wastewater pipe or treatment plant is intended to operate.

**DROUGHT-TOLERANT:** An adjective used to describe any plant species that is capable of surviving with little or no water for extended periods.

**DWELLING UNIT:** One or more habitable rooms that can be occupied by one family with facilities for living, sleeping, cooking, and dining.

**ENDANGERED:** A species or subspecies of plant or animal whose prospects of survival and reproduction are in immediate jeopardy.

**EROSION:** Process by which material is removed from the earth's surface (including: weathering, dissolution, abrasion, and transportation).

**ESTIMATE:** A statement regarding future conditions based on non-mathematical analysis.

**FAULT:** A fracture in the earth's crust forming a boundary between rock masses that have shifted.

**FORECAST:** A statement regarding future conditions based on non-linear numerical assumptions.

**FOOTPRINT:** The ground area covered by a building.

**GRADING:** Alteration of existing slope and shape of the ground surface.

**GRAVITY-FED:** An adjective used to describe a water distribution or wastewater collection system that relies on gravity to move the fluids through pipelines.

**GREYWATER:** Wastewater that does not carry human or animal wastes, which may be used for irrigation purposes.

**GROSS SQUARE FEET (GSF):** Total space within a building.

**GROUND FAILURE:** Mudslide, landslide, liquefaction, or the seismic compaction of soils.

**GROUNDWATER:** Water beneath the surface of the earth.

**HALOGENATED:** Substance treated or combined with fluorine, chlorine, bromine, iodine, or astatine.

**HAZARDOUS BUILDING:** A building that may be hazardous to life in the event of an earthquake because it:

- (1) Was constructed prior to the adoption and enforcement of local codes requiring earthquake resistant design of buildings;
- (2) Is constructed of unreinforced masonry; or,
- (3) Exhibits any one of the following characteristics:
  - o Exterior parapets and ornamentation that may fall on passers-by;
  - o Exterior walls that are not anchored to the floors, roof, or foundation;
  - o Sheeting on roofs or floors incapable of withstanding lateral loads;
  - o Large openings in walls that may cause damage from torsional forces; or,
  - o Lack of an effective system to resist lateral forces.

**HAZARDOUS MATERIAL:** A material or form of energy that could cause injury or illness to persons, livestock, or the natural environment.

**HERBICIDE:** A substance used to destroy plants, especially weeds.

**HOUSEHOLD:** A group of persons living together who may or may not be related.

**IGNEOUS ROCK:** Rock formed by the solidification of molten or partially molten material from within the earth.

**IMPERVIOUS SURFACE:** Ground surface that cannot be penetrated by water. Includes paved and compacted surfaces, as well as those covered by buildings.



**INACTIVE FAULT:** A fault which shows no evidence of movement in recent geologic time and no potential for movement in the relatively near future.

**IN-PLACE VOLUME:** The volume of solid wastes at the densities achieved in a landfill, using earthmoving equipment.

**INFILTRATION:** The introduction of underground water, such as groundwater, into wastewater collection systems. Infiltration results in increased wastewater flow levels.

**INFLOW:** Surface water, such as rainfall runoff, that enters a wastewater collection system through manhole covers and joints or cracks in pipes. Inflow results in increased wastewater flow levels.

**INFRASTRUCTURE:** Permanent utility installations, including roads, water supply lines, sewage collection pipes, and power and communications lines.

**INTERSECTION CAPACITY:** The maximum number of vehicles that has a reasonable expectation of passing through an intersection in one direction during a given time period under prevailing roadway and traffic conditions.

**INVERSION LAYER:** A state in which the air temperature increases with increasing altitude, holding surface air down along with its pollutants.

**ISSUE:** A point or item of discussion focusing on environmental questions germane to a proposed action, used as the structuring unit in this environmental impact assessment.

**KILOWATT:** A measure of the rate of electrical flow equal to one thousand watts.

**KILOWATT-HOUR:** A measure of a quantity of electrical consumption equal to the power of one kilowatt acting for one hour.

**LABOR FORCE:** Residents of working age who are employed or seeking employment.

**LANDFILLING:** A procedure for the disposal of solid or hazardous wastes. The wastes are placed in a designated dumping site and usually covered with dirt or other fill materials.

**LANDSLIDE:** Any downslope mass movement of rock or soil, including rock falls, earth flows, and landslides in the technical sense (a soil mass that retains its essential internal arrangement and becomes disjointed from its subsurface interface).

**LEVEL OF SERVICE:** A measure of the mobility characteristics of an intersection, as determined by vehicle delay and a secondary factor, volume-to-capacity ratio. A volume-to-capacity ratio of less than 0.600 corresponds to level of service "A," while a ratio of 1.00 and above corresponds to level of service "F."

**LIQUEFACTION:** A geologic phenomenon in which surface and near-surface materials (soils, alluvium, etc.) behave like a liquid during seismic shaking.

**MEAN:** Sum of a group of numerical values divided by the number of values - also known as "average."

**MEDIAN:** The middle value in a set of figures arranged in order of magnitude.

**METAMORPHIC ROCK:** A geologic formation that is transformed from sedimentary depositions by contact with heat from intrusion of molten material.

**MAXIMUM CREDIBLE EARTHQUAKE:** The largest Richter magnitude (M) seismic event that appears to be reasonably capable of occurring under the conditions of the presently known geological framework. In the Bay Area, M8.3 is the maximum credible earthquake for the San Andreas fault, M7.5 for the Hayward and Calaveras faults, and M7.0 for the Rodgers Creek and Green Valley-Concord faults.

**MIDDEN:** A refuse heap, especially of a prehistoric habitation.

**MITIGATION MEASURE:** Action taken to reduce or eliminate environmental impacts.

**MOBILE SOURCES:** A source of air pollution that is related to transportation vehicles, such as automobiles or buses.

**MODAL SPLIT:** The distribution of commuters among various transportation modes (single-occupant vehicles, carpools, public transit, etc.).

**NOISE:** Annoying, harmful, or unwanted sound.

**ONCOGENIC:** Tending to cause the formation of tumors.

**OPEN LANDSCAPE:** A landscape with vegetation no taller than eye level - this generally refers to meadows and low brush.

**OVERFLOW:** A condition where effluent completely fills a wastewater line, rises into a manhole shaft and spills onto the surrounding street or ground surface. Line capacity is exceeded.

**PARKLAND LANDSCAPE:** A landscape in which signs of active management are apparent. Little or no understory vegetation or dead wood is found on the forest floor. Lower tree limbs may be trimmed. May include mowing of non-irrigated grassland.

**PASSIVE SOLAR DESIGN:** The use of non-mechanical architectural features and landscaping to control solar heat gain.

**PEAK DRY-WEATHER FLOW:** Wastewater flows consisting of sanitary flow and groundwater infiltration. The period over which dry weather flows are measured is June through September.

**PEAK HOUR:** In reference to public services infrastructure or transportation systems, the hour during which the greatest use occurs.

**PEAK WET-WEATHER FLOW:** Total wastewater flow, consisting of sanitary flow, inflow, and infiltration.

**PERCENT SLOPE:** A common way of expressing the slope of terrain, which is derived by dividing the change in elevation by the horizontal distance traversed. A 45-degree slope can thus be expressed as a 100-percent slope.

**PERCOLATION:** Downward movement of groundwater through soil and bedrock.

**PERFORMANCE STANDARDS:** An adopted set of criteria by which the operation of a system can be rated.

**POTENTIALLY ACTIVE FAULT:** (1) A fault that last moved within the Quaternary Period before the Holocene Epoch (the last 2,000,000 to 11,000 years); (2) a fault which, because it is judged to be capable of ground rupture or shaking, poses an unacceptable risk for a proposed structure.

**PROJECTION:** A statement regarding future conditions based on linear extrapolations of past and present conditions.

**QUATERNARY:** The period of geologic time in the Cenozoic era from the Tertiary through the present.

**RADIOISOTOPE:** A natural or artificially created radioactive form of a chemical element. Typically used in medical therapy and biological research.

**RARE:** A condition in which a species or subspecies, although not currently threatened with extinction, exists in such small numbers throughout its range that it may be endangered if the quality of its environment worsens.

**REACTIVE ORGANIC GASES:** Classes of hydrocarbons (olefins, substituted aromatics, and aldehydes) that are likely to react with ozone and nitrogen dioxide in the atmosphere to form photochemical smog.

**RECYCLING:** Any of a variety of processes whereby waste is separated for reuse or reprocessing into a useful form.

**REGIONAL EMPLOYMENT:** The number of jobs provided in a region. This differs from the number of employed residents in a region to the degree that residents commute to jobs out of the region and to the degree that non-residents fill jobs provided in the region.

**RETROFIT:** Replacement of existing fixtures with new or modified fixtures to improve efficiency.

**RICHTER SCALE:** A logarithmic scale developed in 1935/36 by Dr. Charles F. Richter and Dr. Benno Gutenberg to measure earthquake magnitude by the amount of energy released, as opposed to earthquake intensity as determined by local effects on people, structures, and earth materials.

**RIGHT LATERAL:** The movement of one side of a fault relative to the other is toward the right. The western side of the Hayward fault is moving north while the eastern side is moving south.

**RIPRAP:** A loose assemblage of broken rock or concrete, often used to prevent erosion.

**SAFE YIELD:** In reference to water supply, the combined yield of all available water sources during the worst drought year on record.

**SANITARY FLOW:** That portion of wastewater flow that is generated by domestic, industrial, and commercial customers, as distinct from inflow and infiltration.

**SECONDARY EMPLOYMENT:** Combined indirect and induced employment.

**SEDIMENTARY ROCK:** Rock formed from sediment or transported rock fragments.

**SEDIMENTATION:** Process by which material suspended in water is deposited in a body of water.

**SEICHE:** An earthquake-induced wave in a lake, reservoir, or harbor.



**SODIUM-VAPOR LIGHTS:** Electric lamps containing a small amount of sodium and neon gases. These lamps are more efficient than conventional street lighting.

**SPOILS:** Rock and soil removed during excavation.

**STATIONARY SOURCE:** A source of air pollution that is not mobile, such as a heating plant or an exhaust stack from a laboratory.

**SUBSIDENCE:** The gradual, local settling or sinking of the earth's surface with little or no horizontal motion. (Subsidence is usually the result of gas, oil, or water extraction, hydrocompaction, or peat oxidation, and not the result of a landslide or slope failure.)

**SURCHARGE:** A condition where effluent completely fills a wastewater line and rises into a manhole shaft, but does not overflow onto the surrounding street or ground surface. Line capacity is exceeded.

**SURFACE RUPTURE:** A break in the ground's surface and associated deformation resulting from the movement of a fault.

**SURFACE WATER:** Water in lakes, streams or rivers, as distinct from subsurface groundwater.

**THERM:** The amount of energy necessary to raise 100,000 pounds of water one degree Fahrenheit.

**TOTAL SUSPENDED PARTICULATE MATTER:** A particle of solid or liquid matter, including soot, dust, aerosols, fumes, and mist.

**TRANSITION LANDSCAPE:** A landscape that forms the border between a closed landscape and an open landscape.

**TRANSPORTATION SYSTEMS MANAGEMENT:** A program for encouraging alternatives to private automobile use, such as increased reliance on public transit, carpooling, and bicycles.

**TRUNK LINE:** A primary sewage collection pipeline that collects wastewater from smaller feeder lines.

**TSUNAMI:** A wave, commonly called a tidal wave, caused by an underwater seismic disturbance, such as sudden faulting, landslide, or volcanic activity.

**UNEMPLOYMENT RATE:** The number of persons of working age who are actually seeking employment, divided by the number of persons in the labor force.

**UNINCORPORATED AREA:** Areas that are not within the bounds of an incorporated city.

**VACANCY RATE:** The number of habitable housing units that are vacant for rent or sale divided by the total number of habitable housing units.

**VEGETATION CLEARING:** The removal of all vegetation in an area.

**VEGETATION COMMUNITY:** A group of plant species commonly occurring together in roughly similar proportions.

**VIEWSHED:** The area that can be seen from a specified location.

**VOLUME-TO-CAPACITY RATIO:** In reference to public services or transportation, ratio of peak hour use to capacity.

**WARRANTED:** A condition under which a given action would be justified based on the relevant criteria.

**WATERCOURSE:** Path followed by surface water flow; shown on U.S. Geological Service maps as solid or dashed blue lines.

**WATERSHED:** The area of a landscape from which surface runoff flows to a given point.

**WILDLAND FIRES:** Fires occurring in a nonurban, natural area which contains uncultivated lands, timber, range, watershed, brush, or grasslands.

**WILDLAND LANDSCAPE:** A landscape in which no signs of active management are apparent. Understory vegetation is noticeable and dead and decaying wood is found on the forest floor.

**WILDLIFE CORRIDORS:** A natural corridor, such as an undeveloped ravine, that is frequently used by wildlife to travel from one area to another.

**YIELD:** In relation to surface water supply facilities, the "safe yield" is the amount of water delivered by that facility in the worst drought on record. In relation to subsurface water obtainable by wells, the yield is the average annual amount of water delivered by that well.

## 12.2 ABBREVIATIONS

**ABAG:** Association of Bay Area Governments

**AC-FT/YR:** Acre-feet (of water) per year

**ADT:** Average Daily Traffic

**ADWF:** Average Dry Weather Flow

**AFDC:** Assistance to Families with Dependent Children

**ASF:** Assignable Square Feet (or "Footage")

**BAAQMD:** Bay Area Air Quality Management District

**BIASP:** Bethel Island Area Specific Plan

**Caltrans:** California Department of Transportation

**CARB:** California Air Resources Board

**CCCWD:** Contra Costa County Water District

**CDBG:** Contra Costa County Development Block Grant

**CEQA:** California Environmental Quality Act

**CFP:** California Fully Protected Species as designated by California Fish and Game Code

**CFR:** Code of Federal Regulations

**CHAP:** California State Comprehensive Homeless Assistance Program

**CIAP:** Comprehensive Improvement Assistance Program

**CNEL:** Community Noise Equivalent Level

**CNPS:** California Native Plant Society

**dB:** Decibel

**DEIR:** Draft Environmental Impact Report

**DGP:** Draft General Plan of Contra Costa County

**DHS:** California Department of Health Services

**DRC:** Design Review Committee

**EBMUD:** East Bay Municipal Utilities District

**EDD:** California State Employment Development Department

**EIR:** Environmental Impact Report -- A public document prepared under CEQA used by a governmental agency to analyze the significant environmental effects of a proposed project, to identify alternatives, and to disclose possible ways to reduce or avoid possible environmental damage.

**EPA:** U.S. Environmental Protection Agency

**FAR:** Floor Area Ratio

**FEMA:** Federal Emergency Management Agency

**FHA:** Federal Housing Administration

**FmHa:** Farmers Home Administration

**GPD:** Gallons per Day

**GPM:** Gallons per Minute

**GSF:** Gross Square Feet

**HCD:** California Department of Housing and Community Development



HUD: U.S. Department of Housing and Urban Development

I/I: Inflow and Infiltration

IOC: Internal Operations Committee, Contra Costa County

kW: Kilowatt

kWh: Kilowatt-Hour

LAFCO: Local Agency Formation Commission

$L_{dn}$ : Day-night Average Sound Levels

LIHTC: Low Income Housing Tax Credits

MCC: Mortgage Credit Certificates

MGD: Million Gallons per Day

MOU: Memorandum of Understanding

MRB: Contra Costa Mortgage Revenue Bond Program

NAAQS: National Ambient Air Quality Standards

NEPA: National Environmental Policy Act

NOP: Notice of Preparation, as required by CEQA

$NO_x$ : Oxides of Nitrogen

ORU: Organized Research Unit

OSHA: Occupational Safety and Health Administration (Federal)

PG&E: Pacific Gas and Electric Company

PLAM: Price Level Adjusted Mortgage

ROG: Reactive Organic Gases

RRP: Federal Rental Rehabilitation Program

RWQCB: Regional Water Quality Control Board

SCS: Soil Conservation Service

SHURP: Special Housing and Urban Renewal Program

SRO: Single Resident Occupancy Hotel

SSC: Species of Special Concern as designated by California Department of Fish and Game

RCEB: Regional Center of the East Bay for Persons with Developmental Disabilities

TAC: Toxic Air Contaminants

THC: Total Hydrocarbons

TKN: Total Kjeldahl Nitrogen

TOG: Total Organic Gases

TSP: Total Suspended Particulate Matter

TSM: Transportation Systems Management

UCL: Urban Limit Line

ULL: Urban Limit Line

USGS: U.S. Geologic Survey

V/C: Volume-to-Capacity Ratio







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### TECHNICAL APPENDICES

- A.     Housing Market Analysis
- B.     Summary of Federal and State Low and Moderate Income Programs

**Note:** The individual reports which are included in the Technical Appendix may be obtained by contacting the Contra Costa County Community Development Department (335-1235)





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**APPENDIX A**

**HOUSING MARKET ANALYSIS**

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## APPENDIX A

### HOUSING MARKET ANALYSIS

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## I. Population Growth

### Historic Growth

Prior to 1940, the County's population was concentrated along the County's shoreline. During World War II, West County, in particular Richmond and its surrounding communities, grew rapidly to house the work force for war-related shipbuilding and other industries. Construction of the Caldecott Tunnel in 1937 between Berkeley and Orinda opened up Central Contra Costa County as a series of bedroom communities serving the employment centers of Oakland and San Francisco. Several decades later, further suburban expansion was spurred by construction of the BART rail line between San Francisco, Oakland and Concord.

The County experienced the most rapid growth in the decade between 1940 and 1950, as rapid growth occurred in Richmond and in Central County and almost 200,000 residents were added to the County, a doubling of the population (see Table 1). Contra Costa grew by more than one third during both of the following decades, registering growth rates between 1950 and 1960 and between 1960 and 1970 of 36.8% and 35.9%, respectively.

Table 1  
Historic and Projected Populations and Population Growth: 1900-2000

| <u>Year</u> | <u>Population</u> | <u>Percentage Change</u> |
|-------------|-------------------|--------------------------|
| 1900        | 18,046            |                          |
| 1910        | 31,674            | 75.5%                    |
| 1920        | 53,889            | 70.1                     |
| 1930        | 78,608            | 45.9                     |
| 1940        | 100,450           | 27.8                     |
| 1950        | 298,984           | 197.6                    |
| 1960        | 409,030           | 36.8                     |
| 1970        | 555,805           | 35.9                     |
| 1980        | 656,380           | 18.1                     |
| 1990        | 802,953           | 19.2                     |
| 2000        | 943,000           | 18.7                     |

Source: 1900-1980 U.S. Bureau of the Census as of April 1;  
1990 California State Department of Finance,  
Demographic Research Unit, January 1, 1990;  
2000 ABAG, Projections 90

By the time of the 1980 U.S. Census, the population of Contra Costa County had jumped to 656,380, representing an increase of 100,000 more residents during the decade of the 1970s. or a growth rate of 18.1%.



Contrary to some common perceptions, Contra Costa County has not been one of the fastest growing areas in California during the most recent period of 1980 through July 1989. The County's growth rate of 20.4% during that period compared to an overall growth rate in the nine county San Francisco Bay Area of 14.3%. However, during the same period, the entire State grew at a rate of 22.8%, led by rapid population growth in Southern California.

Table 2 shows the population growth that has occurred in the individual cities of Contra Costa County since 1900. During the decade of the 1970s, the most rapid growth rates were experienced by the cities in West County in Hercules (2266.0%), in East County in Brentwood (67.4%), Pittsburg (60.0%), and Antioch (52.1%), and in Central County in the City of Clayton (135.7%). The cities with the most rapid growth rates between 1980 and 1990 were Hercules (183.3%), Clayton (59.6%), and Brentwood (59.2%). Much of the growth in Clayton and Brentwood was due to annexations. The cities which have experienced the greatest absolute population growth between 1980 and 1990 are: Antioch (an additional 19,349 residents), Pittsburg (12,629), Walnut Creek (10,225), Hercules (10,929), Martinez (8,417) and Richmond (9,668).

Some unincorporated communities that are not listed individually in Table 2 have also grown very rapidly. Both Danville (incorporated in 1982) and San Ramon (incorporated in 1983) have experienced substantial growth since the mid-1970s, as have the Oakley, West Pittsburg, and Discovery Bay unincorporated areas.

The portion of the County population that lives in unincorporated areas has declined as cities have annexed land into their jurisdictions and new cities have incorporated. The population in the unincorporated county has fallen from roughly one half of the total population in 1960 to almost 30% in 1980 and to 19% in 1990 (see Table 3).

TABLE 2

CITY AND COUNTY GROWTH  
1900-1990

| Jurisdiction                | Date of<br>Incorporation/Formation | 1900   | 1910   | 1920   | 1930   | 1940    | 1950    | 1960    | 1970    | 1980    | 1990    |
|-----------------------------|------------------------------------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Antioch                     | February 2, 1872                   | 694    | 1,124  | 1,936  | 3,563  | 5,106   | 11,051  | 17,305  | 28,060  | 42,683  | 62,032  |
| Brentwood                   | January 1, 1948                    | -----  | -----  | -----  | -----  | -----   | 1,729   | 2,186   | 2,649   | 4,434   | 7,060   |
| Clayton                     | March 18, 1964                     | -----  | -----  | -----  | -----  | -----   | -----   | 530     | 1,835   | 4,325   | 6,901   |
| Concord <sup>3</sup>        | February 2, 1905                   | -----  | 703    | 912    | 1,125  | 1,373   | 6,963   | 36,208  | 85,164  | 103,255 | 111,332 |
| Danville                    | July 1, 1982                       | -----  | -----  | -----  | -----  | -----   | -----   | -----   | -----   | -----   | 31,601  |
| El Cerrito                  | August 20, 1917                    | -----  | -----  | 1,505  | 3,870  | 6,137   | 18,011  | 25,437  | 25,190  | 22,731  | 23,374  |
| Hercules <sup>1</sup>       | December 15, 1900                  | -----  | 279    | 373    | 392    | 343     | 343     | 310     | 252     | 5,963   | 16,892  |
| Lafayette                   | July 22, 1968                      | -----  | -----  | -----  | -----  | -----   | -----   | 16,550  | 20,484  | 20,879  | 23,305  |
| Martinez <sup>2</sup>       | April 1, 1876                      | 1,380  | 2,115  | 3,858  | 6,569  | 7,381   | 8,268   | 9,604   | 16,506  | 22,582  | 30,999  |
| Moraga <sup>3</sup>         | November 13, 1974                  | -----  | -----  | -----  | -----  | -----   | -----   | -----   | 11,327  | 15,014  | 16,373  |
| Orinda                      | July 1, 1985                       | -----  | -----  | -----  | -----  | -----   | -----   | -----   | -----   | -----   | 17,751  |
| Pinole                      | June 25, 1903                      | -----  | 798    | 967    | 781    | 834     | 1,147   | 6,064   | 13,266  | 14,253  | 16,949  |
| Pittsburg                   | June 22, 1903                      | -----  | 2,372  | 4,715  | 9,610  | 9,520   | 12,763  | 19,062  | 20,651  | 33,034  | 45,663  |
| Pleasant Hill <sup>1</sup>  | November 14, 1961                  | -----  | -----  | -----  | -----  | -----   | -----   | 19,170  | 24,610  | 25,124  | 32,296  |
| Richmond                    | August 7, 1905                     | -----  | -----  | 16,843 | 20,093 | 23,642  | 99,545  | 71,854  | 79,043  | 74,676  | 84,344  |
| San Pablo <sup>3</sup>      | April 26, 1948                     | -----  | -----  | -----  | -----  | -----   | 14,476  | 19,687  | 21,461  | 19,750  | 21,612  |
| San Ramon                   | July 1, 1983                       | -----  | -----  | -----  | -----  | -----   | -----   | -----   | -----   | -----   | 35,966  |
| Walnut Creek                | October 19, 1914                   | -----  | -----  | 538    | 1,014  | 1,578   | 2,420   | 9,903   | 39,844  | 53,643  | 63,868  |
| Incorporated                |                                    | 2,054  | 14,193 | 31,647 | 47,017 | 56,014  | 176,706 | 217,620 | 378,565 | 462,346 | 688,318 |
| Unincorporated              |                                    | 15,992 | 17,481 | 22,242 | 31,591 | 44,436  | 122,276 | 191,410 | 177,240 | 194,034 | 154,615 |
| Total County                | February 18, 1850                  | 18,046 | 31,674 | 53,889 | 78,608 | 100,450 | 298,984 | 409,030 | 555,805 | 656,380 | 835,553 |
| Change from Previous Decade |                                    | -----  | 13,628 | 22,215 | 24,719 | 21,842  | 198,534 | 110,046 | 146,775 | 100,575 | 160,551 |
| % Change                    |                                    |        | 75.5   | 70.1   | 45.9   | 27.8    | 197.6   | 36.8    | 35.9    | 18.1    | 19.2    |

<sup>1</sup> In 1960, Clayton, Lafayette and Pleasant Hill were unincorporated.<sup>2</sup> In 1970, Moraga was unincorporated.<sup>3</sup> In 1980, Danville, San Ramon, and Orinda were unincorporated.<sup>4</sup> Estimated by California State Department of Finance, for January 1, 1990

Source: U.S. Bureau of the Census, California Department of Finance, Contra Costa County Community Development

**Table 3**  
**Population Distribution Between County**  
**Incorporated and Unincorporated Areas**  
**(1900 - 1990)**

|      | <u>Incorporated</u> |                | <u>Unincorporated</u> |                |
|------|---------------------|----------------|-----------------------|----------------|
|      | <u>Number</u>       | <u>Percent</u> | <u>Number</u>         | <u>Percent</u> |
| 1900 | 2,054               | 11.4           | 15,992                | 88.6           |
| 1910 | 14,193              | 44.8           | 17,481                | 55.2           |
| 1920 | 31,647              | 58.7           | 22,242                | 41.3           |
| 1930 | 47,017              | 59.8           | 31,591                | 40.2           |
| 1940 | 56,014              | 55.8           | 44,436                | 44.2           |
| 1950 | 176,706             | 59.1           | 122,276               | 40.9           |
| 1960 | 217,620             | 53.2           | 191,410               | 46.8           |
| 1970 | 378,565             | 68.1           | 177,240               | 31.9           |
| 1980 | 462,346             | 70.4           | 194,034               | 29.6           |
| 1990 | 648,318             | 80.8           | 154,615               | 19.2           |

Source: U. S. Bureau of the Census, California Department of Finance,  
 Contra Costa County Community Development Department

The largest amount of land transferred out of County jurisdiction has been the result of three incorporations during the 1980s: the Town of Danville (incorporated in 1982), the City of San Ramon (1983), and the Town of Orinda, which officially became a city in July, 1985. Major annexations of unincorporated lands have occurred during the last ten years in the San Ramon Valley; in the Castro Ranch Road area of Richmond and in Hercules; in Lafayette, Walnut Creek, and Clayton; and in the growing southeast area of Antioch and the lands west of Brentwood. Most recently, large areas have been added to the cities of Danville and San Ramon, as the Bishop Ranch Business Park, the Canyon Lakes project and several other Tassajara subdivisions have been completed and immediately annexed. From a high of almost 195,000 residents living outside city boundaries in 1968 (just prior to the incorporation of Lafayette), the unincorporated population in the County has declined to 154,615 in 1990.

Of the three sub-areas of the County, Central County experienced the most rapid growth during the 1960s at a 63.1% growth rate, compared to 10.8% and 26.2% in West and East County, respectively (See Table 4). During the 1970s, East County experienced the greatest growth rate of 45.0%, compared to a decline in West County of 2.4% and a growth rate of 24.3% in Central County. From 1980 to 1990, East County has continued to grow more rapidly than the other areas of the County with a 47.8% growth rate, versus 15.4% in West County and 18.0% in the Central area.



Table 4  
Population Growth in  
Contra Costa County by Sub-Area  
(1960-1990)

|                | <u>1960</u> | <u>1960-70</u><br><u>% Change</u> | <u>1970</u> | <u>1970-80</u><br><u>% Change</u> | <u>1980</u> | <u>1980-90</u><br><u>% Change</u> | <u>1990</u> |
|----------------|-------------|-----------------------------------|-------------|-----------------------------------|-------------|-----------------------------------|-------------|
| West County    | 170,163     | 10.8%                             | 188,602     | -2.4%                             | 184,151     | 15.4%                             | 212,600     |
| Central County | 178,315     | 63.1%                             | 290,779     | 24.3%                             | 361,392     | 18.0%                             | 426,500     |
| East County    | 60,552      | 26.2%                             | 76,424      | 45.0%                             | 110,837     | 47.8%                             | 163,900     |
| Total County   | 409,030     | 35.9%                             | 555,805     | 18.1%                             | 656,380     | 22.3%                             | 835,553     |

Source: 1960, 1970 and 1980 U.S. Bureau of the Census; California Department of Finance; Contra Costa County Community Development Department as of January 1990.

Note: West County includes the cities of El Cerrito, Richmond, San Pablo, Pinole, and Hercules; Central County includes Martinez, Pleasant Hill, Concord, Clayton, Walnut Creek, Lafayette, Moraga, Orinda, Danville, and San Ramon; East County includes Pittsburg, Antioch, and Brentwood.

#### Population Distribution

Over half of the population in the County lives in Central Contra Costa County, while 20.4% of the County residents live in East County and 26.5% live in West County (see Table 5). Currently, 19.3% of the County's population lives in an unincorporated area while 80.7% live in one of the eighteen cities in Contra Costa.

**Table 5**  
**Distribution of Population By Sub-Area**  
**Number and Percent**  
**(1970-1990)**

|                | <u>1970</u>        | <u>1980</u>        | <u>1990</u>        |
|----------------|--------------------|--------------------|--------------------|
| West County    | 188,602<br>(33.9%) | 184,151<br>(28.1%) | 212,600<br>(26.5%) |
| Central County | 290,779<br>(52.3%) | 361,837<br>(55.1%) | 426,500<br>(53.1%) |
| East County    | 76,424<br>(13.8%)  | 110,837<br>(16.9%) | 163,900<br>(20.4%) |
| Total          | 555,805            | 656,380            | 835,553            |

Source: U.S. Bureau of the Census, 1970 and 1980; California  
Department of Finance and Contra Costa County Community  
Development Department

During the last two decades, the proportion of the County in the West County area has declined from 33.9% to 26.5% of the County's population, while Central County has remained somewhat stable, at slightly over half of the County's population and East County has increased its share from 13.8% to 20.4%.

#### Population Projections

ABAG projects that Contra Costa County will increase in population by 9% between 1990 and 1995 (see Table 6). The "Other East" area is anticipated to have the most rapid growth rate of 27.3%, with the Pittsburg-Antioch area following with 18.8% growth. Lamorinda is expected to have the slowest growth with 1.9%.

**Table 6**  
**Population Projections by**  
**Sub-Areas of the County**

|                   | <u>1990</u>   | <u>1995</u>   | <u>Number and % Change</u> |             |
|-------------------|---------------|---------------|----------------------------|-------------|
| West County       | 207,700       | 214,700       | 7,000                      | 3.4%        |
| North Central     | 271,900       | 285,600       | 13,700                     | 5.0         |
| Lamorinda         | 57,100        | 58,200        | 1,100                      | 1.9         |
| San Ramon Valley  | 92,325        | 108,100       | 15,775                     | 17.1        |
| Pittsburg-Antioch | 123,100       | 146,200       | 23,100                     | 18.8        |
| Other East        | <u>37,875</u> | <u>48,200</u> | <u>10,325</u>              | <u>27.3</u> |
| Total             | 790,000       | 861,000       | 71,000                     | 9.0         |

Source: Association of Bay Area Governments, Projections 90;  
Contra Costa County Community Development Department.  
1990 figures are ABAG estimates

## II. Household Growth

### Historic Household Growth

While population is often used as the single measurement of growth, household growth is a more important indicator of housing demand. One of the most striking and well documented changes in the demography of the Bay Area, California, and the nation during the decade of the 1970's was the decrease in average household size. Following state and national trends, the average household size in the nine county San Francisco Bay region decreased from 2.9 persons to 2.57 persons during the 1970's, while the average in Contra Costa County plummeted from almost 3.2 persons per household to less than 2.7 ten years later. The County's household size has continued to decrease in the 1980's although not as drastically as in the previous decade.

The major factors contributing to the decline in household size over the last two decades were the large number of young individuals entering the labor force who set up their own households, and the increase in the number of households headed by individuals over the age of 65. Declining household size also reflected the changing structure of the family, increasing divorce rates, delayed marriage and child bearing ages, and smaller family sizes.

Average household sizes are also a function of the availability of affordable housing and the type of new development occurring in the area. Households tend to double up, young adults tend to leave home to establish separate households later, and seniors are more likely to live in extended families, if affordable



housing is not available. During periods of declining affordability (in terms of rents and sales prices exceeding increases in incomes) household sizes would tend to increase. Average household sizes in a particular area would also change if average unit sizes of new development shifted. The shift in Contra Costa County away from single family development, as multi-family has increased from 17.7% in 1980 to almost 46.3% of new development in 1988, has an impact on declining household sizes as smaller, more affordable units are available.

Because of the decreasing household size, the creation of new households and the demand for new housing units in Contra Costa County has exceeded the proportional increase in population since 1970. Table 7 illustrates this point. Between 1970 and 1980, the County's population grew by 18.1%, while households grew more than twice as fast (almost 40%) and the housing stock increased by 41.8%. (The difference between the number of households and housing units is related to the vacancy rate, i.e. the number of unoccupied housing units.) Since 1980, the household and population growth rate has been much closer. While the County's population increased 22.3% between 1980 and 1990, the number of new households that were formed rose by 26.2% and the number of new housing units increased by 25.2%.

**Table 7**  
**Increase in Contra Costa County Households,**  
**Housing Units and Population**  
**(1970 - 1990)**

|               | <u>1970-1980</u> |                 | <u>1980-1990</u> |                 |
|---------------|------------------|-----------------|------------------|-----------------|
|               | <u>Increase</u>  | <u>% Change</u> | <u>Increase</u>  | <u>% Change</u> |
| Households    | 68,583           | 39.7%           | 63,206           | 26.2            |
| Housing Units | 74,296           | 41.8            | 62,942           | 25.3            |
| Population    | 100,575          | 18.1            | 146,553          | 22.3            |

Sources: U.S. Department of Commerce, 1970 and 1980 Censuses of Population; California Department of Finance population and household estimates for January, 1990; Contra Costa County Community Development Department.

### Household Projections

ABAG estimates that the number of Contra Costa County households will grow by 30,700 between 1990 and 1995, at a growth rate of 10.1% (see Table 8). This exceeds slightly the projected population growth rate of 9.0% for the same time period. The most rapid growth is expected in East County, followed by San Ramon Valley. West County is expected to add 4,100 new households, Central County 13,007, and East County 13,593 new households. Assuming a vacancy rate of 5%, 32,235 new housing units would be needed to accommodate the anticipated 30,700 households.

**Table 8**  
**Household Projections by Sub-Areas of the County**

|                   | <u>1990</u> | <u>1995</u> | <u>Number and % Change</u> |      |
|-------------------|-------------|-------------|----------------------------|------|
| West County       | 80,930      | 85,030      | 4,100                      | 5.1  |
| North Central     | 111,580     | 117,740     | 6,160                      | 5.5  |
| Lamorinda         | 21,320      | 22,210      | 890                        | 4.2  |
| San Ramon Valley  | 31,508      | 37,465      | 5,957                      | 18.9 |
| Pittsburg-Antioch | 44,710      | 54,110      | 9,400                      | 21.0 |
| Other East        | 13,642      | 17,835      | 4,193                      | 30.7 |
| TOTAL             | 307,450     | 334,390     | 30,700                     | 10.1 |

Source: Association of Bay Area Governments, Projections 90;  
Contra Costa County Community Development Department

### III. Labor Force and Employment Growth

#### Labor Force Growth and Characteristics

The number of Contra Costa County residents who contributed to the Bay Area labor force increased substantially in the two decades between 1960 and 1980 (Table 9). As of January, 1990, Contra Costa County residents made up 12.7% of the civilian labor force in the 9 Bay Area Counties.

During the decade of the 1960's, the growth rate in the labor force outstripped both the rate of new jobs created in the County and the increase in population (see Table 10). Between 1960 and 1970 approximately 39,000 jobs were created in the County, while the growth in resident workers was almost double that number (74,000), while the population increased by 146,000 new residents.

The following decade of the 1970's again saw an increase in workers which far outweighed the growth in jobs in the County. Coincidentally, the increase of 100,000 new workers in the County between 1970 and 1980 almost exactly matched population growth during that period. However, only 71,300 new job positions were created by local employers during the decade, resulting in many residents commuting out of the County. Likewise, between 1960 and 1970, job creation in Contra Costa amounted to only one-half of the demand for employment by new workers, adding to the already prevalent out-commute pattern.

**Table 9**  
**TOTAL COUNTY LABOR FORCE 1960-1990**

|       | <u>Number</u> | <u>% Change</u> |
|-------|---------------|-----------------|
| 1960  | 152,313       |                 |
| 1970  | 226,375       | 48.6            |
| 1980  | 326,530       | 44.2            |
| 1990* | 422,300       | 29.3            |

Source: U.S. Bureau of the Census; \*State of California, Employment Development Department, January, 1990.

**Table 10**  
**Increases in Contra Costa County Jobs,  
Labor Force and Population  
(1960-1990)**

|             | <u>1960-1970</u> |                 | <u>1970-1980</u> |                 | <u>1980-1990</u> |                 |
|-------------|------------------|-----------------|------------------|-----------------|------------------|-----------------|
|             | <u>Increase</u>  | <u>% Change</u> | <u>Increase</u>  | <u>% Change</u> | <u>Increase</u>  | <u>% Change</u> |
| Jobs        | 39,200           | 44%             | 71,300           | 56%             | 91,463           | 45.5%           |
| Labor Force | 74,062           | 48.6            | 100,155          | 44.2            | 95,770           | 29.3            |
| Males       | 39,684           | 37              | 40,554           | 27              | --               | --              |
| Females     | 34,378           | 79              | 59,601           | 77              | —                | —               |
| Population  | 146,775          | 35.9            | 100,575          | 18.1            | 146,553          | 22.3            |

Source: U.S. Department of Commerce, 1960, 1970, and 1980 Censuses of Population, Tables P-1 or 14, and 176; job, labor force and population, California Employment Development Dept., estimate for January 1990.

A major factor during the 1970's which contributed to the decade's 44% growth rate in the number of jobs was the entrance of almost 60,000 women into the labor force. The phenomenon of much higher labor force participation rates for females was caused in part by the increasing need for many households to rely on two incomes to meet rising housing costs.



During the most recent period of 1980-1990, the relationship between the growth of new jobs and new workers in Contra Costa County has become more comparable. Due to the boom in commercial construction in Central County, the County's employment base has expanded by over 91,400, while 95,790 new workers have entered the labor force. During the same period, over 146,553 new residents have moved into Contra Costa.

The rate of job growth over the ten year period has been very high, over 45%, which was more than 50% greater than the rate of expansion in the number of labor force participants (a 29% increase). This changed the trend of the two previous decades, when the number of new employment opportunities fell far below the number of new residents who became a part of the labor force. The employment growth rate has remained at least double that of the population growth rate.

The number of females in the labor force, although fewer than the number of males, increased at a faster rate than male workers. The percentage of the work force consisting of women increased from 29% in 1960 to 42% in 1980, with an estimated increase to 43.8% in 1990 (see Table 13). The male labor force experienced a 73.7% growth between 1960 and 1980, while the female labor force increased by 215.7%.

Table 11  
Labor Force By Age and Sex 1960-1990  
Number in Labor Force

|       | <u>1960</u> |        | <u>1970</u> |        | <u>1980</u> |         | <u>1990</u> |         |
|-------|-------------|--------|-------------|--------|-------------|---------|-------------|---------|
| Age   | Male        | Female | Male        | Female | Male        | Female  | Male        | Female  |
| 16-19 | 5,225       | 3,074  | 9,975       | 6,081  | 12,833      | 11,818  | 11,300      | 13,100  |
| 20-24 | 7,758       | 4,110  | 14,800      | 10,543 | 22,450      | 18,508  | 22,900      | 22,600  |
| 25-34 | 24,977      | 8,324  | 33,145      | 15,524 | 51,059      | 39,446  | 64,000      | 51,400  |
| 35-44 | 31,918      | 13,529 | 33,678      | 17,431 | 42,036      | 30,255  | 59,000      | 45,400  |
| 45-64 | 36,085      | 13,607 | 53,608      | 26,666 | 56,169      | 35,296  | 74,100      | 49,200  |
| 65+   | 2,785       | 921    | 3,226       | 1,697  | 4,439       | 2,221   | 5,800       | 3,000   |
| Total | 108,748     | 43,565 | 148,432     | 77,943 | 188,986     | 137,544 | 237,100     | 184,700 |

Source: U.S. Bureau of the Census, 1960, 1970, 1980; ABAG Projections 90 estimate for 1990. Projected 1990 figures are for age 15-19, rather than ages 16-19. ABAG breakdown for male and female labor force participation is for civilian labor force only. Compared to Census data, which include military employees. For 1980 labor force participation by sex, ABAG data was 1% lower for the percent males in the labor force.

Table 12  
Labor Force By Age and Sex 1960-1990  
Percentage of Labor Force

|       | <u>1960</u> |        | <u>1970</u> |        | <u>1980</u> |        | <u>1990</u> |        |
|-------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|
| Age   | Male        | Female | Male        | Female | Male        | Female | Male        | Female |
| 16-19 | 63.0%       | 37.0%  | 62.1%       | 37.9%  | 52.1%       | 47.9%  | 46.3%       | 53.7%  |
| 20-24 | 65.4        | 34.6   | 58.4        | 41.6   | 54.8        | 45.2   | 50.3        | 49.7   |
| 25-34 | 76.4        | 23.6   | 68.1        | 31.9   | 56.4        | 43.6   | 55.5        | 44.5   |
| 35-44 | 70.2        | 29.8   | 65.9        | 34.1   | 58.1        | 41.9   | 56.5        | 43.5   |
| 45-64 | 72.6        | 27.4   | 66.8        | 33.2   | 61.4        | 38.6   | 60.1        | 39.9   |
| 65+   | 75.1        | 24.9   | 65.5        | 34.5   | 66.7        | 33.3   | 65.9        | 34.1   |
| Total | 71.0%       | 29.0%  | 66.0%       | 34.0%  | 58.0%       | 42.0%  | 56.2        | 43.8   |

Source: U.S. Bureau of the Census; ABAG, Projections 90 estimates for 1990.

Table 13  
Percent Increase in Labor Force By Sex - 1960's & 1990's

|             | <u>1960-1970</u> | <u>1970-1980</u> | <u>1980-90</u> | <u>1960-90</u> |
|-------------|------------------|------------------|----------------|----------------|
| Labor Force | 48.6%            | 44.2%            | 28.8%          | 177.3%         |
| Male        | 36.5             | 27.3             | 25.5           | 118.0%         |
| Female      | 78.9             | 76.5             | 34.3           | 323.9%         |

Source: U.S. Bureau of the Census; ABAG Projections 90 estimates for 1990.

Table 14  
Labor Force Participation Rate  
1980-1990

|        | <u>1980</u> | <u>1990</u> | <u>1995</u> |
|--------|-------------|-------------|-------------|
| Male   | 74.2%       | 77.0%       | 77.2%       |
| Female | 52.0        | 56.9        | 60.1        |
| Total  | 62.7        | 66.7        | 68.4        |

Source: ABAG, Projections 90. 1990 and 1995 are projections.

Labor force participation rates, or the percent of the labor force which is employed, are expected to increase for both males and females (see Table 14). However, ABAG projects that male participation rates will increase by 4%, while female participation rates are projected to increase by 15%.

### Labor Force Characteristics

Corresponding with upper middle class socio-economic characteristics of the County as a whole, a high percentage of the Contra Costa work force is employed in well-paying managerial and professional jobs. According to the 1980 U.S. Census, eight out of every ten workers who lived in Central County were employed in "white collar" jobs (professional, technical, sales, service or clerical positions), which represented 63% of all white collar workers in the entire County.

Conversely, in East County over one-third of the labor force was employed in the "operatives" occupational category, which includes many "blue collar" jobs. The West County sub-areas most closely resembles the occupations characteristics of the region as a whole; 28% of the workers in the five county San Francisco-Oakland area were employed in professional jobs in 1980, 36% in sales/clerical, 13% in service occupations, and 22% in the operative category.

### Unemployment Rates

The unemployment rate for the Contra Costa civilian labor force was 5.8% at the time of the 1980 U.S. Census. It had risen to 7.0% in 1982 and 7.6% in 1983, but dropped 4.0% as of January 1, 1990 (Table 15), representing 17,100 unemployed persons, recording to EDD estimates. The unemployment rate for the County has consistently been slightly lower than the rate for the San Francisco-Oakland area and much lower than the rates for the state.

Recent employment rate estimates for individual cities in the County provided by EDD vary from a high of 7.4% in San Pablo and 6.6% in Richmond, to a low of 1.9% in Danville and 2.7% in Lafayette, San Ramon, and Walnut Creek. EDD predicts that unemployment may rise somewhat to the 4.5 to 5.0 range.



Table 15  
Average Annual Unemployment Rates For  
Contra Costa County and California  
(1983 - 1990)

|      | <u>Contra Costa County</u> | <u>California</u> |
|------|----------------------------|-------------------|
| 1982 | 7.0%                       | 10.0%             |
| 1983 | 8.0                        | 9.7               |
| 1984 | 6.6                        | 7.8               |
| 1985 | 5.9                        | 7.2               |
| 1986 | 5.5                        | 6.7               |
| 1987 | 4.9                        | 5.8               |
| 1988 | 4.6                        | 5.3               |
| 1989 | 4.0                        | ---               |
| 1990 | 4.0                        | ---               |

Source: California Employment Development Department. 1990 figure as of January 1, 1990.

#### Job Location of County Residents

As of January 1990, the labor force of Contra Costa County was approximately 422,300 workers, as compared to 292,700 jobs offered by local employers. This imbalance has existed for some time, as reflected in the commuting data compiled by the 1980 U.S. Census. The majority of employed County residents in 1980 were employed within the County (59.3%). An additional 22.7% were employed in Alameda County and 12.9% were employed in San Francisco (Table 16). These figures may be compared to statewide totals. In 1980, 87% of the labor force in California worked in the same county as their residence, while in Contra Costa the portion was only 59%.

Table 16  
Job Location of County Residents  
1980

| <u>County of Employment</u> | <u>Number</u> | <u>Percent of Total</u> |
|-----------------------------|---------------|-------------------------|
| Contra Costa                | 159,651       | 59.3%                   |
| Alameda                     | 61,189        | 22.7                    |
| San Francisco               | 34,658        | 12.9                    |
| Marin                       | 1,464         | 0.5                     |
| San Mateo                   | 3,574         | 1.3                     |
| Santa Clara                 | 2,076         | 0.8                     |
| Solano/Other                | 6,524         | 2.4                     |
| Not Reported                | 30,260        | ---                     |
| Total                       | 299,396       | 100.0                   |

Note: Percentage distribution excludes those not reporting.

Source: U.S. Bureau of the Census

Based upon the responses from the census, West County residents were most likely to commute out of the County to their jobs (50% of the workers), compared to less than 20% of the East County residents who commuted out in 1980. The high percentage of West County residents who work outside the County may be partially explained by the close proximity of Alameda County employment centers such as Berkeley and Oakland.

Almost 25,000 residents commuted from West County south across the Contra Costa-Alameda County line to jobs elsewhere in the region in 1980, while a slightly larger number of residents (26,500) commuted to local jobs in the West County area. A relatively small number of West County commuters (1,010) travelled to jobs in Marin County.

As in the case of West County, a similarly high portion (49%) of the local workforce in the Lamorinda-Walnut Creek area of Central County commuted to jobs outside Contra Costa in 1980, with 42% of these workers employed in San Francisco or in the Berkeley-Oakland area. In the Concord-Martinez areas, only one third of the employed residents commute to jobs outside the County, with 25% of the total traveling to San Francisco and Oakland.

#### Employment Growth

Contra Costa County has continued to increase its share of Bay Area jobs from 7.1% in 1960, 7.7% in 1970, to 8.0% in 1980 (see Table 17). Contra Costa job growth this decade is only exceeded by Santa Clara and Alameda in the Bay Area, according to ABAG. ABAG in its November 1989 San Francisco Bay Area: 1900-2005 report estimates that Contra Costa County jobs will increase to 9.5% of Bay Area jobs in 1990 and 9.8% in 2005.

The economic development of Contra Costa County began with early agricultural uses throughout the County. Industrial development began to occur along the County's shoreline and near the railroad lines early in the 1890's, with oil refineries, steel fabricators and chemical firms the significant employers. During the 1940's the industrial base in West County grew significantly. West County is now a fully developed, mature industrial area with some redevelopment beginning to take place.

Since World War II, economic development of the County has generally proceeded from west to east, with a significant amount of activity now occurring in Central County. As the last vacant lands are developed in North Central County and the San Ramon Valley, pressures will intensify to develop more housing and commercial uses in East County.

Of the 292,700 jobs within Contra Costa County, according to ABAG, approximately 67% of the positions are now located in Central County, (see Table 19). Approximately 22% of Contra Costa's jobs are located in West County and 11% are in East County. While East Contra Costa is the fastest growing residential area, the number of jobs that have been created there have lagged well behind housing construction.

Table 17  
Employment, Contra Costa County and Bay Area  
1960-1990

|                     | <u>1960</u> | <u>1970</u> | <u>1980</u> | <u>1990</u> |
|---------------------|-------------|-------------|-------------|-------------|
| Contra Costa County | 103,400     | 143,000     | 201,237     | 292,700     |
| Bay Area            | 1,452,400   | 1,976,000   | 2,535,155   | 3,073,280   |

Source: California Employment Development Department; Association of Bay Area Governments.

Table 18  
Employment Growth, 1960-1980

|      | <u>Number</u> | <u>% Change</u> |
|------|---------------|-----------------|
| 1960 | 103,400       |                 |
| 1970 | 143,000       | 38.3%           |
| 1980 | 201,237       | 40.7%           |
| 1990 | 292,700       | 45.9%           |

Source: Association of Bay Area Governments, 1974 report and Projections 90.

Table 19  
Employment by SubArea  
1990

|         | <u>Number</u> | <u>Percent</u> |
|---------|---------------|----------------|
| West    | 65,070        | 22.2%          |
| Central | 195,550       | 66.8           |
| East    | 32,080        | 11.0           |
| Total   | 292,700       | 100.0          |

Source: Association of Bay Area Governments, Projections 90.

Since 1980, the employment base of Contra Costa County has grown by 91,463 jobs. Major increases have been registered in the professional "white collar" categories, largely as the result of a boom in office construction along the I-680 corridor. During the early and mid-1980's, commercial construction along the I-680 corridor in Central County added approximately 15 million square feet of new office space. This burst of office building was concentrated in Concord,



Walnut Creek, and San Ramon. In San Ramon, the Bishop Ranch Business Park was successful in attracting several very large corporations to relocate whole divisions of professional, clerical and data processing workers from their San Francisco headquarters.

Comparatively low land costs and the availability of a large labor pool continue to make Central County a desirable area for the establishment, expansion or relocation of existing businesses, although major corporate relocations slowed down in the mid and late 1980's as office rents in San Francisco became more competitive due to overbuilding.

The number of jobs in the "communications and utilities" category increased the most rapidly between December, 1980 and March 1988 by 363%, adding 13,600 jobs, with the "FIRE" category (financial, insurance, and real estate firms) more than doubling between 1980 and 1988, adding 13,800 positions (see Table 20). Most of the growth in the FIRE category, as well as in the TCU (Transportation, Communications, Utilities) industrial classification was associated with the relocations by several major corporations into the County (e.g. Bank of America and Pacific Bell). Business services grew by 9,800 positions and the "mining" category increased dramatically as a result of the relocation of the Chevron U.S.A. land exploration division to Concord.

Table 20  
Contra Costa County Wage and Salary Employment by Industry  
(1980-1990)

| Industry                                | 1980    | % of<br>1988 | 1988    | % of<br>total | % Chng<br>80-88 | 1990    |
|---|---------|--------------|---------|---------------|-----------------|---------|
| Agriculture                             | 1,400   | (0.7)        | 1,200   | (0.4)         | -14.3           | 1,100   |
| Mining                                  | 600     | (0.3)        | 2,900   | (0.1)         | 383.3           | 3,400   |
| Construction                            | 13,300  | (6.5)        | 20,600  | (7.4)         | 54.9            | 20,900  |
| Manufacturing                           | 27,900  | (13.6)       | 30,200  | (10.9)        | 8.2             | 31,300  |
| -chemicals & petroleum                  | 10,000  | (4.9)        | 13,500  | (4.9)         | 35.0            | 14,400  |
| -electronics and instrmnts <sup>3</sup> | 4,300   | (2.1)        | 3,800   | (1.4)         | -11.6           | 4,000   |
| Transportation, Comm.                   |         |              |         |               |                 |         |
| Utilities                               | 11,900  | (5.8)        | 20,600  | (7.4)         | 73.1            | 21,700  |
| -communications & utl.                  | 3,000   | (1.5)        | 13,900  | (5.0)         | 363.3           | 14,100  |
| Wholesale Trade                         | 8,800   | (4.3)        | 10,900  | (3.9)         | 23.9            | 11,400  |
| Retail Trade                            | 47,800  | (23.3)       | 56,000  | (20.2)        | 17.2            | 59,400  |
| -restaurants and bars                   | 12,300  | (6.0)        | 26,000  | (6.2)         | 40.7            | 18,300  |
| Finance, Insurance, Real Estate         | 12,200  | (5.9)        | 26,000  | (9.4)         | 113.1           | 26,300  |
| Services                                | 41,400  | (20.2)       | 67,700  | (24.4)        | 63.5            | 77,700  |
| -business services                      | 9,200   | (4.5)        | 19,000  | (6.9)         | 106.5           | 23,100  |
| -health services                        | 11,800  | (5.7)        | 17,700  | (6.4)         | 50.0            | 19,900  |
| Government                              | 40,000  | (19.5)       | 41,200  | (14.9)        | 3.3             | 42,700  |
| TOTAL                                   | 205,300 |              | 277,300 |               | 35.1            | 295,900 |

Source: California Employment Development Department, Annual Planning Information, Contra Costa County, June, 1989

Notes: (1) Because of changes made in classifying some jobs, the totals for 1980 can not be directly compared with later estimates in some categories. Totals do not include persons involved in labor-management trade disputes. Employment is for December of each year (not annual averages).  
(2) Projections by EDD (March, 1988 benchmark)  
(3) Includes some electrical equipment manufacturing which is not considered "high technology".

Office and residential construction in the County during the 1980's has pushed employment in the construction industry up to 20,600 persons. New construction and demand has also helped to sustain a very high rate of growth in the number of eating and drinking establishments and in health services. Restaurants,

bars, and other food service outlets added 5,000 jobs between the end of 1980 and 1988. Health services also grew significantly, increasing by 5,900 positions.

Surprisingly, County manufacturing continued to grow through the mid-1980's, with job losses in some older basic industries more than offset by gains in chemical and petroleum refining, printing and publishing activities. Much of the employment shifts in the manufacturing sector are due to fluctuations in the petroleum industry. During the first half of the decade, the County's oil refineries showed impressive growth, adding approximately 2,200 jobs between 1980 and 1985. However, during 1986 and 1987, approximately 500 workers were laid off, which was coupled with the continuing decline of other heavy industries such as the manufacturing of lumber and paper products, primary and fabricated metals, and other durable goods. Agriculture has declined by 14% since 1980, with a decrease of 200 jobs.

#### Employment Projections

The California Employment Development Department (EDD) estimates indicate that Contra Costa County jobs grew at a very fast rate (4.7%) during 1987, due primarily to office and related development, but that job growth will slow somewhat to 3.6% to 3.0% during 1988 and 1989. While over 10,000 new jobs were created in (or transferred into) the County between December, 1986 and December, 1987, and 12,500 new jobs added between December, 1987 and March, 1988, approximately 10,000 jobs were expected to be added during 1989 and about 8,600 jobs in 1990.

Almost three quarters of the new jobs expected during the next two years will be in services and retail trade. The largest jump in workers (10,000 new full and part-time positions) will be in the broad services sector, which by the March 1988 had displaced retail trade as the biggest industrial category in the County, representing 78% of all County jobs. Business services are expected to add 4,100 positions over the 1989-1990 period, with the most dramatic increases occurring with the temporary help agencies that supply office and clerical workers. Approximately 2,200 new jobs are also anticipated in the health services field as a result of the John Muir Hospital expansion in Walnut Creek and the new San Ramon Valley Community Hospital. Retail trade is also expected to increase by 3,400 jobs in 1989 and 1990, reflecting plans for new retail stores including Sears at Hilltop Mall, Gottschalks in the new County East Mall, Raley's in Oakley, and Safeway in East County.

Twenty year employment projections have been prepared by the Association of Bay Area Governments (ABAG). The latest ABAG projection series (Projections '90) anticipates that the number of jobs in Contra Costa County will grow from approximately 232,500 in 1985 to approximately 334,710 positions in the year 1995 (see Table 21). The ABAG job projection is consistent with the amount of employment growth that is expected under the County's General Plan. The Land Use Element states that approximately 298,000 jobs are anticipated in the County after all of the commercial and industrial projects that have been approved by



the cities and County since 1985 are added to the existing employment base (see Table 18). Presumably, most of these recently approved and under construction projects will be finished by the early 1990's.

**Table 21**  
**Job Projections by Sub-Areas of**  
**Contra Costa County**

|                   | <u>1990</u> | <u>1995</u> | <u>Number &amp; Percent Change</u> |       |
|-------------------|-------------|-------------|------------------------------------|-------|
| West County       | 65,070      | 73,690      | 8,620                              | 13.2% |
| North Central     | 141,260     | 156,280     | 15,020                             | 10.6  |
| Lamorinda         | 14,880      | 15,450      | 570                                | 3.8   |
| San Ramon Valley  | 37,850      | 47,152      | 9,302                              | 24.6  |
| Pittsburg-Antioch | 27,410      | 33,380      | 5,970                              | 21.8  |
| Other East        | 6,230       | 8,757       | 2,527                              | 40.6  |
| Total             | 292,700     | 334,709     | 42,009                             | 14.4  |

Source: ABAG, Projections 90; Contra Costa Community Development Department

#### IV. Housing Growth

The County's housing supply grew by 25.2%, or by 63,524 units between 1980 and 1990 (see Table 22). The most significant growth in absolute terms occurred in Central County, in which the supply increased by 30,636 units. The greatest growth rate, however, occurred in East County, which increased by 47.9%, compared to 18.2% and 22.1% in West and Central County, respectively. The housing in the unincorporated areas of the County has declined by 16.9% as areas have incorporated.

**Table 22**  
**Change in Housing Units by Sub Area**  
**April 1, 1980 to January 1, 1990**

|              | <u>1980</u> | <u>1990</u> | <u>% change</u> | <u>Change in Units</u> |
|--------------|-------------|-------------|-----------------|------------------------|
| West         | 71,835      | 84,902      | 18.2            | 13,067                 |
| Central      | 138,745     | 169,381     | 22.1            | 30,636                 |
| East         | 41,338      | 61,159      | 47.9            | 18,821                 |
| Total County | 251,918     | 315,442     | 25.2            | 63,524                 |

Source: Contra Costa County Community Development Department

**Table 23**  
**Distribution of Housing Units**  
**by Sub-Area**  
**(1980-1990)**

|              | 1980          |                | 1990          |                |
|--------------|---------------|----------------|---------------|----------------|
|              | <u>Number</u> | <u>Percent</u> | <u>Number</u> | <u>Percent</u> |
| West         | 71,835        | 28.5           | 84,902        | 26.9           |
| Central      | 138,745       | 55.1           | 169,381       | 53.7           |
| East         | <u>41,338</u> | <u>16.4</u>    | <u>61,159</u> | <u>19.4</u>    |
| Total County | 251,918       | 100.0          | 315,442       | 100.0          |

Table 25 presents the growth in housing units over the last decade by unit type. Between 1980 and 1990, an average of 4,310 single family units (including condominiums) were added per year, 178 duplex-fourplex units were added per year, 1,775 apartment units in larger complexes (5 or more units) per year and 31 mobile homes annually. Apartment complexes increased to a larger proportion of the total County housing stock, from 15.7% to 18.2%.

Source: Contra Costa County Community Development Department

**Table 24**  
**Change in Housing Units**  
**By Incorporated and Unincorporated Areas**

|                      | <u>1980</u> | <u>1990</u> | <u>%<br/>Change</u> | <u>Change<br/>in Units</u> |
|----------------------|-------------|-------------|---------------------|----------------------------|
| Incorporated Areas   | 180,798     | 256,353     | 41.8%               | 75,555                     |
| Unincorporated Areas | 71,120      | 59,089      | -16.9%              | -12,031                    |
| Total County         | 251,918     | 315,442     | 25.2%               | 63,524                     |

Source: Contra Costa County Community Development Department

Despite adding over 15,000 housing units (Table 26) during the 1980s, the unincorporated County experienced a net decrease in housing units of 12,066 because of annexation of unincorporated territory and the incorporation of new cities (Table 25B).

**Table 25 A**  
**Housing Units by Type**  
**(1980-1990)**

|               | April 1,<br>1980  | January 1,<br>1990 | Increase<br>by type |
|---------------|-------------------|--------------------|---------------------|
| Single family | 184,801<br>(73.4) | 227,905<br>(72.4)  | 43,104<br>(68.5)    |
| 2-4 Units     | 21,438<br>(8.5)   | 23,216<br>(7.4)    | 1,778<br>(2.8)      |
| 5 Units       | 39,595<br>(15.7)  | 57,346<br>(18.2)   | 17,751<br>(28.2)    |
| Mobile Homes  | 5,947<br>(2.4)    | 6,256<br>(2.0)     | 309<br>(0.5)        |
| Total         | 251,781           | 314,723            | 62,942              |

Source: 1980 - U. S. Census  
1990 - California Department of Finance,  
Demographic Research Unit

Table 26 indicates the level of growth in the housing stock in the unincorporated and incorporated areas of the County each year over the last decade. The following Table 27 provides a more detailed breakdown of new housing units produced each year over the last decade in each of the cities and unincorporated areas of the County.

The number of units produced per year in the County over the last decade has averaged about 6,400 units per year. Production has remained higher over the last five years, with an average of 8,500 units per year. The average number of units produced in the unincorporated areas of the County over the last ten years has been 1,527 units per year. Reflecting the higher production levels in the County overall, and average of 1,998 units have been produced per year in the unincorporated areas in the last five years (1985-1989).

Table 28 presents the number of rental units produced each year in the unincorporated and the incorporated areas of the County over the last decade. In Contra Costa County, department development of buildings with five or more units has fallen 35% in the three years since 1986. Residential development has occurred primarily in Antioch, Concord, Hercules, Monterey, Pittsburg, Pleasant Hill, Richmond, San Ramon, Walnut Creek and the unincorporated areas of the County. The areas with no or minimal multifamily development were Brentwood, Clayton, Danville, Lafayette, Moraga and Orinda, all of which did have other types of development during this period (see Table 25).



Homebuilding during the 1980's has fluctuated from one year to the next, consistent with the national economic climate. Residential construction began a nosedive during the early 1980's when very high interest rates and a national recession caused housing completions to reach their lowest point in 1982. By the end of 1984, however, the local homebuilding industry had recovered and the last half of the decade has seen a substantial increase in construction. Peak construction levels occurred in 1987, apparently due to lower interest levels and increased multifamily production resulting from the flurry of project proposals prior to the implementation of the 1986 Tax Reform Act which eliminated many of the tax incentives for rental housing ownership. (See Table 29).

Table 25B

Housing Units by Type  
Unincorporated County  
(1980-1990)

|               | <u>Unincorporated</u>   |                         | Increase or<br>Decrease by<br>Type |
|---------------|-------------------------|-------------------------|------------------------------------|
|               | <u>April 1<br/>1980</u> | <u>January<br/>1990</u> |                                    |
| Single Family | 60,197<br>(84.6%)       | 48,001<br>(81.2%)       | -12,196                            |
| 2 - 4 Units   | 3,483<br>(4.9%)         | 3,103<br>(5.3%)         | -380                               |
| 5 Units       | 5,110<br>(7.2%)         | 5,245<br>(8.9%)         | +135                               |
| Mobile Homes  | 2,384<br>(3.4%)         | 2,740<br>(-4.6%)        | +356                               |
| Total         | 71,155                  | 59,089                  | -12,066                            |

Source: 1980 U.S. Census  
1990 California Department of Finance  
Demographic Research Unit

TABLE 26

Annual Growth in Housing Units in Incorporated and Unincorporated Areas  
by Four Sub-Areas of Contra Costa County

|                      | <u>1980</u>     | <u>1981</u>     | <u>1982</u>     | <u>1983</u>     | <u>1984</u>     | <u>1985</u>     | <u>1986</u>     | <u>1987</u>     | <u>1988</u>     | <u>1989</u>     | <u>Total<br/>1980-90</u> |
|----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------------------|
| East County          | 1,743           | 1,438           | 732             | 1,131           | 989             | 2,101           | 2,775           | 3,381           | 2,663           | 2,868           | 19,821                   |
| Inc.                 | 957             | 969             | 535             | 775             | 478             | 1,561           | 2,058           | 2,005           | 1,718           | 1,803           | 12,859                   |
| Uninc.               | 786             | 469             | 197             | 356             | 511             | 540             | 717             | 1,356           | 945             | 1,065           | 6,942                    |
| North Central County | 1,882           | 1,762           | 1,133           | 973             | 1,932           | 2,258           | 2,648           | 2,925           | 2,305           | 1,838           | 19,656                   |
| Inc.                 | 1,560           | 1,402           | 937             | 802             | 1,785           | 2,158           | 2,239           | 2,423           | 1,476           | 1,375           | 16,157                   |
| Uninc.               | 322             | 360             | 196             | 171             | 147             | 100             | 409             | 502             | 829             | 463             | 3,499                    |
| San Ramon Valley     | 1,334           | 739             | 377             | 389             | 1,346           | 720             | 1,002           | 1,970           | 1,774           | 1,329           | 10,983                   |
| Inc.                 | 1,025           | 535             | 270             | 198             | 980             | 352             | 350             | 1,578           | 1,361           | 761             | 7,410                    |
| Uninc.               | 309             | 204             | 107             | 194             | 366             | 368             | 652             | 392             | 413             | 568             | 3,573                    |
| West County          | 1,281           | 692             | 349             | 647             | 830             | 1,179           | 1,365           | 2,867           | 1,964           | 1,893           | 13,067                   |
| Inc.                 | 1,044           | 531             | 288             | 623             | 729             | 1,082           | 1,313           | 2,519           | 1,890           | 1,812           | 11,831                   |
| Uninc.               | 237             | 161             | 61              | 24              | 101             | 97              | 52              | 348             | 74              | 81              | 1,236                    |
| Inc.                 | 4,586<br>(73.5) | 3,437<br>(74.2) | 2,030<br>(78.3) | 2,395<br>(76.3) | 3,972<br>(77.9) | 5,153<br>(82.3) | 5,960<br>(76.5) | 8,525<br>(76.5) | 7,112<br>(75.9) | 5,750<br>(72.6) | 48,920<br>(76.2)         |
| Uninc.               | 1,654<br>(26.5) | 1,194<br>(25.8) | 561<br>(21.7)   | 745<br>(23.7)   | 1,125<br>(22.1) | 1,105<br>(17.7) | 1,830<br>(23.5) | 2,618<br>(23.5) | 2,261<br>(24.1) | 2,177<br>(27.4) | 15,270<br>(23.8)         |
| TOTAL                | 6,240           | 4,631           | 2,591           | 3,140           | 5,097           | 6,258           | 7,790           | 11,143          | 9,373           | 7,927           | 64,191                   |

Source: Contra Costa Community Development Department

TABLE 27

**ANNUAL GROWTH IN HOUSING UNITS  
BY JURISDICTION IN CONTRA COSTA COUNTY (1)  
(1980 - 1990)**

|                              | <u>1980</u> | <u>1981</u> | <u>1982</u> | <u>1983</u> | <u>1984</u> | <u>1985</u> | <u>1986</u> | <u>1987</u> | <u>Total</u> |       | <u>1980-90</u> |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------|----------------|
| <b>EAST COUNTY</b>           |             |             |             |             |             |             |             |             |              |       |                |
| Antioch                      | 478         | 361         | 273         | 462         | 267         | 865         | 1,197       | 1,105       | 895          | 1,040 | 6,943          |
| Brentwood                    | 36          | 79          | 16          | 5           | 15          | 100         | 327         | 118         | 151          | 68    | 916            |
| Pittsburg                    | 443         | 529         | 246         | 308         | 196         | 596         | 534         | 781         | 672          | 695   | 5,000          |
| W. Pittsburg (uninc)         | 188         | 223         | 20          | 75          | 94          | 137         | 304         | 583         | 307          | 60    | 1,991          |
| Oakley (uninc)               | 300         | 80          | 73          | 214         | 307         | 234         | 335         | 518         | 360          | 651   | 3,072          |
| Disco Bay (uninc)            | 187         | 139         | 92          | 44          | 112         | 154         | 62          | 258         | 252          | 304   | 1,604          |
| Other unincorp.              | 111         | 27          | 12          | 23          | (2)         | 15          | 16          | 17          | 26           | 50    | 295            |
| Sub-total                    | 1,743       | 1,438       | 732         | 1,131       | 989         | 2,101       | 2,775       | 3,381       | 2,663        | 2,868 | 19,821         |
| <b>MOUTH CENTRAL COUNTY</b>  |             |             |             |             |             |             |             |             |              |       |                |
| Martinez                     | 240         | 360         | 199         | 239         | 1,020       | 371         | 210         | 481         | 191          | 120   | 3,431          |
| Concord                      | 450         | 272         | 370         | 280         | 314         | 841         | 788         | 766         | 437          | 299   | 4,817          |
| Clayton                      | 99          | 0           | 2           | 19          | 63          | 54          | 3           | 7           | 28           | 89    | 364            |
| Pleasant Hill                | 343         | 292         | 210         | 135         | 67          | 311         | 514         | 724         | 373          | 187   | 3,156          |
| Walnut Creek                 | 233         | 331         | 96          | 85          | 210         | 385         | 591         | 233         | 251          | 500   | 2,915          |
| Lafayette                    | 85          | 47          | 31          | 13          | 27          | 25          | 27          | 65          | 45           | 68    | 433            |
| Moraga                       | 62          | 40          | 4           | 5           | 58          | 136         | 86          | 103         | 98           | 61    | 653            |
| Orinda (2)                   | 48          | 60          | 25          | 26          | 26          | 35          | 20          | 44          | 53           | 51    | 388            |
| Other unincorp.              | 322         | 360         | 196         | 171         | 147         | 100         | 409         | 502         | 829          | 463   | 3,499          |
| Sub-total                    | 1,882       | 1,762       | 1,133       | 973         | 1,932       | 2,258       | 2,648       | 2,925       | 2,305        | 1,838 | 19,656         |
| <b>SAN RAMON VALLEY</b>      |             |             |             |             |             |             |             |             |              |       |                |
| Alamo (uninc)                | 40          | 63          | 24          | 27          | 56          | 57          | 78          | 120         | 158          | 191   | 814            |
| Danville (3)                 | 425         | 310         | 125         | 63          | 250         | 155         | 124         | 361         | 273          | 107   | 2,193          |
| San Ramon (4)                | 600         | 225         | 145         | 135         | 730         | 197         | 226         | 1,217       | 1,088        | 654   | 5,217          |
| Blackhawk (uninc)            | 110         | 110         | 80          | 120         | 307         | 268         | 266         | 268         | 251          | 364   | 2,144          |
| Other unincorp. (5)          | 159         | 31          | 3           | 44          | 3           | 43          | 308         | 4           | 4            | 13    | 612            |
| Sub-total                    | 1,334       | 739         | 377         | 389         | 1,346       | 720         | 1,002       | 1,970       | 1,774        | 1,329 | 10,980         |
| <b>WEST COUNTY</b>           |             |             |             |             |             |             |             |             |              |       |                |
| El Cerrito                   | 41          | 30          | (1)         | 36          | 48          | 145         | 25          | 20          | 200          | 52    | 596            |
| Richmond                     | 449         | 216         | 46          | 211         | 237         | 279         | 665         | 1,482       | 716          | 667   | 5,068          |
| San Pablo                    | 249         | 222         | 31          | 133         | 81          | 114         | 11          | 257         | -3           | 27    | 1,122          |
| Pinole                       | 30          | 60          | 42          | 91          | 90          | 92          | 134         | 289         | 255          | 450   | 1,533          |
| Hercules                     | 275         | 3           | 70          | 152         | 273         | 452         | 478         | 471         | 722          | 616   | 3,512          |
| Other unincorp.              | 237         | 161         | 61          | 24          | 101         | 97          | 52          | 348         | 741          | 81    | 1,903          |
| Sub-total                    | 1,281       | 692         | 349         | 647         | 830         | 1,179       | 1,365       | 2,867       | 2,631        | 1,893 | 13,734         |
| <b>UNINCORPORATED COUNTY</b> |             |             |             |             |             |             |             |             |              |       |                |
| Sub-total                    | 1,654       | 1,194       | 561         | 742         | 1,125       | 1,105       | 1,830       | 2,618       | 2,928        | 2,177 | 15,934         |
| <b>COUNTY TOTAL</b>          | 6,240       | 4,631       | 2,591       | 3,140       | 5,097       | 6,258       | 7,790       | 11,143      | 9,373        | 7,928 | 64,191         |

Source: Contra Costa County Community Development Department



TABLE 28

APARTMENT UNITS\* ADDED BY YEAR  
(1980-1990)

|                                     | 1980 | 1981 | 1982 | 1983 | 1984  | 1985  | 1986  | 1987  | 1988  | 1989  | Net<br>80-90 |
|-------------------------------------|------|------|------|------|-------|-------|-------|-------|-------|-------|--------------|
| Antioch                             | 63   |      | 100  | 122  | -10   | 321   | 212   | 160   | -6    | 74    | 1,036        |
| Brentwood                           |      |      |      |      |       |       |       | 10    |       |       | 10           |
| Clayton                             |      |      |      |      |       |       |       |       |       |       | 0            |
| Concord                             | -61  | 20   | 224  | 68   | 24    | 87    | 449   | 450   | 241   | 54    | 1,339        |
| Danville                            |      |      |      |      | 6     | 8     |       |       | 0     |       | 14           |
| El Cerrito                          | 17   | 8    |      | 16   | 5     | 99    |       |       | 168   | 26    | 339          |
| Hercules                            |      |      |      | 21   | 24    | 125   | 145   | 161   | 350   | 197   | 1,026        |
| Lafayette                           |      |      |      |      |       |       |       | 13    |       |       | 13           |
| Martinez                            | 5    | 234  |      |      | 476   | 72    | 30    | 332   | 8     |       | 1,157        |
| Moraga                              |      |      |      |      |       |       |       |       |       |       | 0            |
| Orinda                              |      |      |      |      |       |       |       |       |       |       | 0            |
| Pinole                              |      |      |      |      |       |       | 18    | 98    | 8     | 42    | 166          |
| Pittsburg                           |      |      |      |      | -16   | 434   | 430   | 486   | 608   | 310   | 2,252        |
| Pleasant Hill                       | 184  |      | 5    |      | 4     | 144   | 216   | 418   | 16    |       | 987          |
| Richmond                            | 5    | 25   | 3    |      | 28    | 21    | 403   | 1,155 | 305   | 230   | 2,175        |
| San Pablo                           | 61   | 228  | 54   | 110  | 90    | 113   | 8     | 238   |       |       | 902          |
| San Ramon                           |      |      |      |      | 508   | 40    | 102   | 700   | 502   | 240   | 2,092        |
| Walnut Creek                        | 16   | 182  | 36   |      | 22    | 28    | 394   | 90    | 70    | 246   | 1,084        |
| Unincorporated                      | 299  | 125  | 32   | 24   | 36    | 88    | 121   | 898   | 864   | 226   | 2,713        |
| Total Units Built                   | 797  | 822  | 454  | 351  | 1,223 | 1,583 | 2,528 | 5,209 | 2,923 | 1,645 | 17,545       |
| Total Units Converted or demolished | -208 | 77   |      |      | -26   |       |       |       | -6    |       | -240         |
| Total Net Add.                      | 589  | 822  | 454  | 361  | 1,197 | 1,583 | 2,528 | 5,209 | 2,917 | 1,645 | 17,305       |

Source: Contra Costa County Community Development Department

\*Apartments are defined as units in buildings containing five or more dwelling units.

1 Data may be incomplete for Danville in 1988.

Table 29  
Annual Growth in Housing Units by Type,  
1980-1989

| <u>Year</u> | <u>Single<br/>Family</u> | <u>2-4<br/>Units</u> | <u>5+<br/>Units</u> | <u>Mobile<br/>Homes</u> | <u>Total</u> |
|-------------|--------------------------|----------------------|---------------------|-------------------------|--------------|
| 1980        | 4,172                    | 240                  | 674                 | 66                      | 5,152        |
| 1981        | 3,585                    | 148                  | 640                 | 52                      | 4,425        |
| 1982        | 1,859                    | 180                  | 487                 | 24                      | 2,550        |
| 1983        | 2,702                    | 118                  | 239                 | 175                     | 3,234        |
| 1984        | 3,930                    | 185                  | 1,381               | 1                       | 5,497        |
| 1985        | 4,449                    | 153                  | 1,676               | 6                       | 6,284        |
| 1986        | 4,869                    | 179                  | 2,618               | -100                    | 7,566        |
| 1987        | 6,865                    | 141                  | 4,292               | 13                      | 11,311       |
| 1988        | 4,536                    | 207                  | 3,805               | 10                      | 8,658        |
| 1989        | <u>6,020</u>             | <u>220</u>           | <u>1,939</u>        | <u>32</u>               | <u>7,927</u> |
| TOTAL       | 42,987                   | 1,771                | 17,751              | 279                     | 62,788       |

Source: California Department of Finance, Demographic Research Unit, as of April of each year.

## V. Population and Household Characteristics

### Population

In 1990, Contra Costa County's population is 802,933, with 154,615 (or 19.2%) in the County's unincorporated areas. Table 30 presents the 1990 population figures for the unincorporated areas and each city of the County.

Table 30  
Contra Costa County  
Population by Area (As January 1, 1990)

|                       | <u>NUMBER</u> | <u>PERCENT</u> |
|-----------------------|---------------|----------------|
| <u>West County</u>    |               |                |
| El Cerrito            | 23,374        | 2.9            |
| Hercules              | 16,892        | 2.1            |
| Pinole                | 16,949        | 2.1            |
| Richmond              | 84,344        | 10.5           |
| San Pablo             | 21,612        | 2.7            |
| Unincorporated        | 49,000        | 6.1            |
| Subtotal              | 212,171       | 26.4%          |
| <u>Central County</u> |               |                |
| Clayton               | 6,901         | 0.9            |
| Concord               | 111,332       | 13.7           |
| Danville              | 31,601        | 3.9            |
| Lafayette             | 23,305        | 2.9            |
| Martinez              | 30,999        | 3.9            |
| Moraga                | 16,373        | 2.0            |
| Orinda                | 17,751        | 2.2            |
| Pleasant Hill         | 32,296        | 4.0            |
| San Ramon             | 35,966        | 4.5            |
| Walnut Creek          | 63,868        | 8.0            |
| Unincorporated        | 56,615        | 7.0            |
| Subtotal              | 427,007       | 53.2%          |
| <u>East County</u>    |               |                |
| Antioch               | 62,032        | 7.7            |
| Brentwood             | 7,060         | 0.9            |
| Pittsburg             | 45,663        | 5.7            |
| Unincorporated        | 49,000        | 6.1            |
| Subtotal              | 163,755       | 20.4%          |
| Total Incorporated    | 648,318       | 80.7%          |
| Unincorporated        | 154,615       | 19.3%          |
| Total County          | 802,933       | 100.0%         |

Source: California Department of Finance; Community Development Department



## Households

Table 31  
Number of Households by Sub-Area of the County  
January, 1990

|                      | <u>Number</u> | <u>Percent</u> |
|----------------------|---------------|----------------|
| West County          | 81,230        | 26.7%          |
| Central County       | 164,734       | 54.1           |
| East County          | 58,660        | 19.2           |
| Incorporated Areas   | 247,313       | 81.2           |
| Unincorporated Areas | 57,311        | 18.2           |
| Total County         | 304,624       | 100.0          |

Source: California Department of Finance; Community Development Department

Contra Costa County households have increased in number from 241,418 in 1980 to 304,624 in 1990. Of these households, 18.2% or 57,311 households reside in the unincorporated areas of the County (see Table 31).

## Household Size

In the decade between 1970 and 1980, the average household size declined by 0.5 persons within Contra Costa County (Table 32). Central County experienced the greatest decline (0.62 persons per household). East County had the smallest reduction in household size and in 1980 had an average household size considerably larger than West or Central County. The household size has continued to decline since 1980 as shown by the estimates for 1990.

Table 32  
Average Household Size  
by Sub-Area of the County

|                       | <u>1970</u> | <u>1980</u> | <u>1990*</u> |
|-----------------------|-------------|-------------|--------------|
| West                  | 3.04        | 2.63        | 2.54         |
| Central               | 3.29        | 2.67        | 2.54         |
| East                  | 3.20        | 2.85        | 2.71         |
| Total                 | 3.19        | 2.69        | 2.61         |
| Unincorporated County |             | 2.83        | 2.66         |

Source: U.S. Bureau of the Census from ABAG Projections 90  
data

\*Estimated by Contra Costa County  
Community Development Department

Table 33 estimates average household sizes estimated for each city in Contra Costa ranging from the smallest average household size of 2.14 in Walnut Creek and the largest household size of 2.91 in Hercules.

**Table 33**  
**Average Household Size by**  
**City and Area of the County**  
**(1990)**

| <u>Persons Per Household</u> |      |
|------------------------------|------|
| West County                  |      |
| El Cerrito                   | 2.26 |
| Hercules                     | 3.11 |
| Pinole                       | 2.79 |
| Richmond                     | 2.54 |
| San Pablo                    | 2.39 |
| SUBTOTAL                     | 2.54 |
| Central County               |      |
| Clayton                      | 2.97 |
| Concord                      | 2.52 |
| Danville                     | 2.89 |
| Lafayette                    | 2.52 |
| Martinez                     | 2.50 |
| Moraga                       | 2.64 |
| Orinda                       | 2.63 |
| Pleasant Hill                | 2.34 |
| San Ramon                    | 2.93 |
| Walnut Creek                 | 2.71 |
| SUBTOTAL                     | 2.53 |
| East County                  |      |
| Antioch                      | 2.72 |
| Brentwood                    | 2.85 |
| Pittsburg                    | 2.74 |
| Rural East                   | 2.63 |
| SUBTOTAL                     | 2.71 |
| Unincorporated County        | 2.66 |
| TOTAL COUNTY                 | 2.57 |

Source: State Department of Finance

ABAG estimated that households will continue to decline to 2.57 in 1990, 2.54 in 1995, with a continuing decline to 2.46 in the year 2005. This trend indicates that the demand for new housing units should be shifting away from the large single family detached home to a smaller single family home or condominium.

## Income

The U.S. Department of Housing and Urban Development (HUD) produces median household income figures adjusted by household sizes approximately every year (see Table 34).

**Table 34**  
**1990 Median Income Levels**

| <u>Household Size</u> | <u>Very Low</u> | <u>Low</u> | <u>Moderate</u> |
|-----------------------|-----------------|------------|-----------------|
| 1 Person              | \$15,750        | \$24,700   | \$37,100        |
| 2 Person              | 18,000          | 28,250     | 42,350          |
| 3 Person              | 20,250          | 31,750     | 47,650          |
| 4 Person              | 22,500          | 35,300     | 52,900          |
| 5 Person              | 24,300          | 37,500     | 56,200          |
| 6 Person              | 26,100          | 39,700     | 59,500          |
| 7 Person              | 27,900          | 41,950     | 62,800          |
| 8 Person              | 29,700          | 44,150     | 66,200          |

Source: U. S. Department of Housing and Urban Development figures released February, 1990 for Oakland PMSA (Alameda and Contra Costa Counties) based on a median income of \$44,100 for a family of four.

According to HUD 1990 median income figures, the Oakland Primary Metropolitan Statistical Area, which includes Alameda and Contra Costa Counties, ranked sixth in the state after the San Jose, Anaheim-Santa Ana, Santa Barbara-Santa Maria-Lompoc, San Francisco, and Oxnard-Ventura metropolitan statistical areas. While Contra Costa County is located in one of the more affluent areas of the state, it is important to note the disparities in incomes for different populations within the County.

A look at various populations within the County reveals a vast difference in economic status. 1980 census data provides a basis for comparison of different populations (See Table 35). For example, the median income for renter households was half (50.2%) the median income of owner occupant households. Incomes also varied by ethnicity. White households had a median income that was 66% higher than Black households, 27% higher than American Indian households, and 19% higher than households of Spanish origin, but 12% lower than Asian and Pacific Islander households. Female headed households with children had mean incomes that were 40% of those of families with children overall.



**Table 35**  
**Average Income Levels for Different County Populations**

| <u>By Household Types</u>                 | <u>Median</u> | <u>Mean</u> |
|---|---------------|-------------|
| Households                                | \$22,870      | \$26,539    |
| Families                                  | 26,510        | 31,268      |
| Unrelated Individuals                     | 10,152        | 12,740      |
| Families with Children                    |               | 29,711      |
| Female Headed Households<br>with Children |               | 11,751      |
| <u>By Housing Tenure</u>                  |               |             |
| Owner-occupant Households                 | 27,649        | 31,144      |
| Renter-occupant Households                | 13,866        | 16,334      |
| <u>By Ethnicity</u>                       |               |             |
| White                                     | 23,777        | 27,562      |
| Black                                     | 14,275        | 17,743      |
| American Indian                           | 18,699        | 20,588      |
| Asian and Pacific<br>Islander             | 27,070        | 28,730      |
| Spanish Origin                            | 20,005        | 21,971      |

Source: U.S. Bureau of Census, 1980.

**Table 36**  
**Populations Below Poverty Level**

|  | <u>Number Below<br/>Poverty Level</u> | <u>% Below<br/>Poverty Level</u> | <u>Total<br/>Population</u> |
|--|---------------------------------------|----------------------------------|-----------------------------|
| Persons  | 49,086                                | 7.5%                             | 656,380                     |
| Families   | 10,860                                | 6.1%                             | 178,295                     |
| Households                                       | 17,800                                | 7.4%                             | 241,418                     |
| Female Headed Families                           | 5,696                                 | 24.5%                            | 23,221                      |
| Female Headed Families<br>with Children under 18 | 5,288                                 | 31.0%                            | 17,048                      |
| Population 65+                                   | 3,811                                 | 6.6%                             | 57,731                      |
| Children under 18                                | 17,770                                | 10.0%                            | 177,447                     |

Source: U.S. Bureau of the Census, 1980.

\*Note different than age distribution due to sampling.

Poverty level incidence rates for different populations also reveal the level of economic distress among different populations (see Table 36). In 1980, 49,086 persons in Contra Costa County had incomes below the poverty level, or 7.5% of the total population. The neediest groups in Contra Costa County in terms of poverty status appear to be female headed households, particularly those with children, and single, unrelated individuals. There were 5,696 female headed households with incomes below poverty levels in 1980, which represents 23.2% of all female headed households. In comparison, only 6.1% of families have incomes below poverty level. Almost a third of female headed households with children under 18 years old had incomes below poverty levels.

Not surprisingly, homeowner, or owner-occupant, households have generally higher income than renter households. In 1980, only 10.3% of the county's homeowners had incomes of less than \$10,000, while 34.7% of the renter households had incomes less than \$10,000 (Tables 37 and 38). West County had the highest proportion of lower income homeowners within the county (16.3% had incomes of less than \$10,000). In Central County, only 6.3% of the homeowners had incomes of less than \$10,000 in 1980. Nearly three quarters (72.4%) of the county's homeowners had household incomes of \$20,000 or more as compared to 31.2% of the renters.

**Table 37**  
**Income Distribution**  
**of Homeowners**

|              | \$0<br>to<br>\$4,999 | \$5,000<br>to<br>\$9,999 | \$10,000<br>to<br>\$14,999 | \$15,000<br>to<br>\$19,999 | \$20,000+ | All<br>Owners |
|--------------|----------------------|--------------------------|----------------------------|----------------------------|-----------|---------------|
| West         | 6.2%                 | 10.1%                    | 9.5%                       | 12.4%                      | 61.8%     | 100.0%        |
| Central      | 2.2                  | 4.1                      | 5.9                        | 7.4                        | 80.4      | 100.0         |
| East         | 4.0                  | 7.9                      | 9.5                        | 11.9                       | 66.7      | 100.0         |
| Total County | 3.7                  | 6.6                      | 7.6                        | 9.7                        | 72.4      | 100.0         |

Source: U.S. Bureau of the Census, 1980.

**Table 38**  
**Income Distribution**  
**of Renters**

|              | \$0<br>to<br>\$4,999 | \$5,000<br>to<br>\$9,999 | \$10,000<br>to<br>\$14,999 | \$15,000<br>to<br>\$19,999 | \$20,000+ | All<br>Owners |
|--------------|----------------------|--------------------------|----------------------------|----------------------------|-----------|---------------|
| West         | 18.9%                | 22.4%                    | 19.3%                      | 15.1%                      | 24.3%     | 100.0%        |
| Central      | 10.2                 | 17.3                     | 17.9                       | 16.2                       | 38.4      | 100.0         |
| East         | 22.4                 | 21.6                     | 21.1                       | 13.3                       | 21.6      | 100.0         |
| Total County | 15.0                 | 19.7                     | 18.4                       | 15.7                       | 31.2      | 100.0         |

Source: U.S. Bureau of the Census, 1980

As reported in the 1980 census, there were significant regional differences in the county, with West County households reporting a median income of \$18,808, East County reporting \$19,509, and Central County reporting a median household income of \$26,794, compared to a median household income of \$22,875 countywide (See Table 39).

**Table 39**  
**Number and Distribution of**  
**Households by Income**  
**(1980)**

| <u>Income</u>    | <u>West</u> | <u>%</u> | <u>Central</u> | <u>%</u> | <u>East</u> | <u>%</u> | <u>County</u> | <u>%</u> |
|------------------|-------------|----------|----------------|----------|-------------|----------|---------------|----------|
| 0 - \$9,999      | 18,555      | 26.6     | 18,448         | 13.9     | 9,572       | 24.8     | 46,575        | 19.3     |
| 10,000-19,999    | 18,186      | 26.1     | 27,464         | 20.6     | 10,357      | 26.8     | 56,007        | 23.2     |
| 20,000-29,999    | 16,085      | 23.1     | 29,474         | 22.1     | 10,058      | 26.0     | 55,617        | 23.0     |
| 30,000-39,999    | 9,220       | 13.2     | 25,600         | 19.2     | 5,353       | 13.8     | 40,173        | 16.6     |
| 40,000+          | 7,610       | 10.9     | 32,117         | 24.1     | 3,319       | 8.6      | 43,046        | 17.8     |
| Total Households | 69,656      | 99.9     | 133,103        | 99.9     | 38,659      | 100.0    | 241,418       | 99.9     |
| Median Income    | \$18,808    |          | \$26,794       |          | \$19,509    |          | \$22,875      |          |

Source: U.S. Bureau of the Census, 1980

While ABAG 1990 household income data differs greatly from HUD 1990 data, it does provide disaggregated income estimates for cities and unincorporated areas of Contra Costa County (see Table 40). According to ABAG, Alamo/Blackhawk and Orinda far surpass other areas with mean income levels of \$91,500 and \$91,300, respectively, in 1990. San Pablo, Pittsburg and Richmond ranked lowest in terms of mean income levels.



Table 40  
1990 Mean Household Income by  
Area of County

|                   |        |
|-------------------|--------|
| Antioch           | 43,100 |
| Brentwood         | 41,100 |
| Clayton           | 62,000 |
| Concord           | 44,200 |
| Danville          | 76,500 |
| El Cerrito        | 49,100 |
| Hercules          | 59,600 |
| Lafayette         | 68,200 |
| Martinez          | 46,100 |
| Moraga            | 72,000 |
| Orinda            | 91,300 |
| Pinole            | 49,400 |
| Pittsburg         | 35,400 |
| Pleasant Hill     | 47,000 |
| Richmond          | 36,200 |
| San Pablo         | 29,200 |
| San Ramon         | 67,000 |
| Walnut Creek      | 53,300 |
| Alamo-Blackhawk   | 91,500 |
| Rodeo-Crockett    | 39,500 |
| Rural East County | 45,100 |
| Remainder         | 69,800 |
| Total County      | 49,600 |

Notes: All areas are City Spheres of Influence, with the exception of San Ramon, Walnut Creek, Alamo-Blackhawk, Rodeo-Crockett, and Rural East County.

Source: Association of Bay Area Governments, Projections 90.

In the period from 1978 to 1985, Contra Costa County median adjusted gross income failed to keep up with inflation. Real median adjusted gross income declined by 17% due to a rapid rise in the cost of living. At the same time, average adjusted gross income, which is more skewed by extremes in values, increased at 16.5% over inflation, indicating that upper echelon wage earners have experienced wage increases. At the same time, the number of individuals in the lowest income levels increased the most rapidly. As Table 41 indicates, even when adjusted for inflation, the lowest income group earning less than \$14,000 per year in 1985 dollars increased by 37%. This indicates an increasing need for housing affordable to very low income households.

**Table 41**  
**Impact of Inflation and Sluggish Income Growth**  
**On the Total Number of Individuals Reporting Adjusted Gross Incomes**  
**Contra Costa County**

| Income Class<br>(Constant 1985) | <u>1978</u> | <u>1985</u> | <u>Percentage<br/>Change (78-85)</u> |
|---------------------------------|-------------|-------------|--------------------------------------|
| \$ 0-14,000                     | 70,502      | 96,663      | 37.0%                                |
| \$ 14,000-24,000                | 41,209      | 53,538      | 29.9%                                |
| \$ 24,000-36,000                | 43,204      | 51,023      | 18.1%                                |
| \$ 36,000-50,000                | 41,341      | 43,630      | 5.5%                                 |
| \$ 50,000-75,000                | 33,402      | 38,116      | 14.1%                                |
| \$ 75,000 >                     | 15,414      | 20,058      | 30.1%                                |
| Total Returns                   | 245,072     | 303,028     | 23.6%                                |

Source: California Franchise Tax Board; Association of Bay Area Governments

Actual state taxable incomes from all returns in 1985 show that approximately one-third of Contra Costa County taxpayers earned less than \$14,000 in 1985 (See Table 41).

According to the Association of Bay Area Governments (ABAG), Contra Costa County experienced one of the lowest rates of household income growth of the nine Bay Area Counties, at 12.9% compared to a Bay Area average of 13.9% increase from 1985 to 1988. When adjusted for inflation, region wide household income growth has stagnated, with a growth of only 3.2% from 1985 to 1988. ABAG estimates that 40% of that growth is due to an increased number of workers per household rather than increases in wages. In Contra Costa County, household incomes have increased only 2.2% over the same time period when adjusted for inflation, with 41% of that increase due to increased labor force participation. In November of 1988, ABAG estimated that mean household incomes in Contra Costa County rose from \$42,500 to \$47,975. Antioch and San Ramon had the greatest increases in household incomes at 16.6% and 15.5% increases, respectively, from 1985 to 1988, with Martinez, Clayton and Pinole experiencing the lowest increases in household income at 10.7%, 10.8% and 10.9%.

According to ABAG, Contra Costa County had experienced the greatest increase in income inequality within the Bay Area region from 1978 to 1985, with a rapid increase in incomes for higher income brackets (see Table 42). This is attributed to wage increases in the managerial and professional classes in Central County, particularly Orinda, Lafayette, Walnut Creek, Danville and San Ramon. Unfortunately, incomes for the remaining 75% of the labor force have not kept pace with inflation during this period.

**Table 42**  
**Percent Distribution and Change of Contra Costa County's Taxable Income**  
**Taxable Years 1978 - 1985: Total Returns**  
**(in 1985 Dollars)**

| Adjusted Gross<br>Income Class | Percent |        |        |        |        |        |        |        |
|--------------------------------|---------|--------|--------|--------|--------|--------|--------|--------|
|                                | 1978    | 1979   | 1980   | 1981   | 1982   | 1983   | 1984   | 1985   |
| \$ 0-14,000                    | 44.97   | 43.62  | 40.83  | 38.47  | 35.83  | 34.24  | 32.76  | 31.89  |
| \$ 14,000-24,000               | 24.31   | 22.18  | 20.79  | 19.62  | 19.18  | 18.66  | 18.24  | 17.67  |
| \$ 24,000-36,000               | 18.04   | 18.40  | 19.08  | 18.75  | 18.69  | 18.14  | 17.53  | 16.84  |
| \$ 36,000-42,000               | 5.30    | 6.05   | 6.26   | 6.73   | 6.86   | 6.81   | 6.89   | 6.81   |
| \$ 42,000-50,000               | 3.41    | 4.46   | 5.58   | 6.59   | 7.05   | 7.39   | 7.51   | 7.59   |
| \$ 50,000-75,000               | 1.70    | 2.29   | 5.35   | 7.23   | 8.93   | 10.34  | 11.58  | 12.58  |
| \$ 75,000+                     | 2.26    | 3.00   | 2.11   | 2.61   | 3.46   | 4.41   | 5.48   | 6.62   |
| Total                          | 100.00  | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Source: State of California, Franchise Tax Board, Annual Report; Association of Bay Area Governments

HUD median household income figures increased at a rapid rate during the first part of the decade, but have slowed in recent years, with an average increase between 1980 and 1990 of 6.7% per year (see Table 43). These household income figures have increased almost 43% between 1980-85. Between 1985 and 1990, incomes have increased at a slower cumulative rate of 32%. Between 1980 and 1990, median incomes have increased 88.7%.

**Table 43**  
**Annual Median Household Income Increases**

| Income Level |          | Annual Increase | Cumulative<br>1980-85 | Increases<br>1985-90 |
|--------------|----------|-----------------|-----------------------|----------------------|
| 1980         | \$23,375 | 12.9%           |                       |                      |
| 1981         | 27,187   | 16.3            |                       |                      |
| 1982         | 30,500   | 12.2            |                       |                      |
| 1983         | 31,600   | 3.6             |                       |                      |
| 1984         | 32,000   | 1.3             |                       |                      |
| 1985         | 33,375   | 4.3             | 42.8                  |                      |
| 1986         | N/A      | 0.0             |                       |                      |
| 1987         | 36,700   | 10.0            |                       |                      |
| 1988         | 40,100   | 9.3             |                       |                      |
| 1989         | 42,400   | 5.7             |                       |                      |
| 1990         | 44,100   | 4.0             |                       | 32.1                 |

Source: U.S. Department of Housing and Urban Development for Oakland PMSA (Alameda and Contra Costa Counties) for family of four.



## Age Distribution

Reflecting national and state trends, the Contra Costa County population is aging. The median age of the county's population has increased from 27.8 in 1970 to 31.5 years in 1980 (Table 44). ABAG projections indicate that the median age will continue to increase to 37.5 years of age by 2005.

The percentage of the population under age 19 decreased from about 36% of the total population in 1970 to 31% in 1980. The proportion of children making up the County's population is expected to decrease to approximately 24.7% in the year 2005. Conversely, the proportion of the population aged 65 and over increased from 6.9% in 1970 to 9.3% in 1980. This age group is expected to increase to 11.3% of the population by the year 2005.

Table 44  
Age Distribution

|              | <u>1970</u> | <u>1980</u> | <u>Projected *</u><br><u>1990</u> | <u>Projected</u><br><u>1995</u> | <u>Projected</u><br><u>2005</u> |
|--------------|-------------|-------------|-----------------------------------|---------------------------------|---------------------------------|
| Under 5      | 8.3%        | 6.7%        | 7.3%                              | 6.5%                            | 6.0%                            |
| 5-19         | 27.8        | 24.4        | 19.8%                             | 19.4                            | 18.7                            |
| 20-64        | 56.9        | 59.6        | 61.3%                             | 64.0                            | 64.1                            |
| 65 and over  | 6.9         | 9.3         | 11.6%                             | 10.1                            | 11.3                            |
| Total Number | 558,389     | 656,380     | 803,000                           | 861,000                         | 946,900                         |
| Median Age   | 27.8        | 31.5        | 33.7                              | 35.0                            | 37.5                            |

Source: 1980 U.S. Census, 1990 Department of Finance Population Estimate.

\*Calculated from Department of Finance Population Projects for California Counties 1980-2020, December, 1986, Report 86, page 3.

East County had the youngest population of any sub-area of the county in 1980; 31.7% of the population was below the age of 18 compared to 27.6% for the entire county (see Table 45). West County had the highest proportion of elderly, with 10.2% of its population aged 50 years or older, compared to 9.3% in the County overall.

The median age structure of the three areas of the county differed only to a small degree in 1980, although there wide variations among individual communities (Table 43). West County had the highest proportion of elderly, with 10.2% of its population aged 65 years or older compred to 9.3% in the County overall. However, in West County, median age varied widely from Kensington (41.0) and El Cerrito (40.1) to Hercules (28.4) (Tables 46 and 47). Central County had a range from Walnut Creek (39.6) and Orinda (38.5) to Concord (29.6), and East County median ages ranged from a county high on Bethel Island (48.6) to Oakley (25.9) and Antioch (27.8).

**Table 45**  
**Age Distribution**  
**by Sub-Areas**  
**(1980)**

|                            | <u>West</u> | <u>Central</u> | <u>East</u> | <u>County</u> |
|----------------------------|-------------|----------------|-------------|---------------|
| Under 5                    | 7.2%        | 5.7%           | 9.2%        | 6.7%          |
| 5-17                       | 19.9        | 20.9           | 22.5        | 20.9          |
| 18-64                      | 62.7        | 64.3           | 60.1        | 63.2          |
| Over 65                    | 10.2        | 9.1            | 8.2         | 9.3           |
| Total Number<br>of Persons | 184,151     | 361,392        | 110,827     | 656,380       |
| Median Age                 | 31.3        | 32.6           | 29.6        | 31.5          |

Source: U.S. Bureau of the Census

**Table 46**  
**Median Age of Population**  
**in Unincorporated Communities**  
**(1980)**

| <u>Area</u>                | <u>Median Age</u> | <u>Percent<br/>Over 65</u> |
|----------------------------|-------------------|----------------------------|
| Alamo                      | 36.3              | 5.8                        |
| Bethel Island              | 48.6              | 19.7                       |
| Discovery Bay              | 34.6              | 3.2                        |
| El Sobrante                | 31.5              | 6.8                        |
| Kensington                 | 41.0              | 16.7                       |
| Oakley                     | 25.9              | 7.1                        |
| Rodeo                      | 29.2              | 7.6                        |
| Sand Hill                  | 30.7              | 10.5                       |
| Tara Hills-Montalvin Manor | 29.1              | 4.5                        |
| Vine Hill-Pacheco          | 28.3              | 5.3                        |
| West Pittsburg             | 29.0              | 9.8                        |

Source: U.S. Bureau of the Census, 1980.

**Table 47**  
**Median Age of Population**  
**in Incorporated Cities**  
**(1980)**

| <u>City</u>   | <u>Median Age</u> | <u>Percent Over 65</u> |
|---------------|-------------------|------------------------|
| Antioch       | 27.8              | 7.5                    |
| Brentwood     | 29.4              | 11.9                   |
| Clayton       | 31.6              | 3.0                    |
| Concord       | 29.6              | 7.3                    |
| Danville      | 33.4              | 4.9                    |
| El Cerrito    | 40.1              | 15.9                   |
| Hercules      | 28.4              | 2.6                    |
| Lafayette     | 35.9              | 10.0                   |
| Martinez      | 31.4              | 8.5                    |
| Moraga        | 34.5              | 5.7                    |
| Orinda        | 38.5              | 8.2                    |
| Pinole        | 31.3              | 4.9                    |
| Pittsburg     | 27.1              | 7.4                    |
| Pleasant Hill | 31.5              | 8.5                    |
| Richmond      | 30.0              | 10.5                   |
| San Pablo     | 28.9              | 11.6                   |
| San Ramon     | 30.1              | 3.5                    |
| Walnut Creek  | 39.6              | 20.2                   |
| County        | 31.5              | 9.3                    |

Source: U.S. Bureau of the Census, 1980.

**Table 48**  
**Contra Costa County Population**  
**by Age and Sex**

| <u>Age</u> | <u>1980</u> |               | <u>1990</u> |               | <u>1995</u> |               | <u>2005</u> |               |
|------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|
|            | <u>Male</u> | <u>Female</u> | <u>Male</u> | <u>Female</u> | <u>Male</u> | <u>Female</u> | <u>Male</u> | <u>Female</u> |
| 0-4        | 22,421      | 21,614        | 26,900      | 25,500        | 28,500      | 27,000        | 29,000      | 27,400        |
| 5-19       | 81,365      | 78,505        | 80,800      | 77,700        | 84,700      | 81,900        | 90,100      | 87,200        |
| 20-64      | 191,437     | 200,194       | 247,400     | 253,500       | 272,600     | 279,200       | 298,700     | 307,900       |
| 65+        | 24,875      | 35,969        | 33,800      | 44,600        | 37,800      | 49,300        | 47,700      | 58,900        |
| Median     | 30.13       | 31.80         | 33.07       | 34.24         | 34.46       | 35.53         | 36.92       | 38.00         |

Source: Association of Bay Area Governments, Projections 90.



### Educational Distribution

The educational level of Contra Costa residents was relatively high in 1980. Almost half of the population aged 25 and over (49.4%) in the county in 1980 had some college education and 25.5% had graduated from college (Table 49). This compares with the State of California in which 42% of the residents aged 25 and over had some college education and 19.6% had graduated from college.

Educational attainment was the highest in Central County where 58.2% of those over 25 had some college education and only 10.7% had not graduated from high school. East County had the highest percentage of those who had not graduated from high school (30.8%), a rate which was almost three times the proportion in Central County.

Table 49  
Highest Level of Education  
for Persons 25 or More Years of Age  
(1980)

|                            | <u>West</u> | <u>Central</u> | <u>East</u> | <u>Total<br/>County</u> | <u>State of<br/>California</u> |
|----------------------------|-------------|----------------|-------------|-------------------------|--------------------------------|
| Elementary                 | 12.8%       | 4.3%           | 15.9%       | 8.5%                    | 14.2%                          |
| High School 1-3            | 13.6        | 6.4            | 14.9        | 9.8                     | 12.3                           |
| High School 4              | 33.0        | 30.2           | 38.8        | 32.3                    | 31.4                           |
| College 1-3                | 21.7        | 26.2           | 19.8        | 23.9                    | 22.4                           |
| College 4+                 | 18.9        | 32.9           | 10.6        | 25.5                    | 19.6                           |
| Total Number<br>Of Persons | 112,864     | 225,133        | 62,361      | 400,358                 | 14,043,986                     |

Source: U.S. Bureau of the Census.

### Ethnic Distribution

As the County has grown, it has become more racially diverse. In 1940, less than 5% of the County's population was of minority origin; whereas by 1980, 18.5% of the County was of minority origin (see Table 50). 1985 Census data indicates that Hispanic population has increased from 8.3 to 9.2% of the County's population between 1980-85, representing an increase from 54,600 to 67,100 people. Census data for "other races" indicates that that population grew from 37,400 in 1980 to 59,000 in 1985, or from 5.7 to 8.1% of population, mostly due to immigration.

The racial composition of the population varies by area of the County. While 81.5% of the total County population was in the "white" category in 1980, the percentage was 60.5% in West County and 92.9% in Central County. West County had the highest proportion of blacks (25.7%), while East County and Central County had 7.8% and 1.2%, respectively. West County also has the highest

proportion of Asians, 7.5% versus 4.7% for the total County. The area with the largest proportion of Spanish Origin population was East County (17.2%), while the percentage for the County overall was 8.5%.

**Table 50**  
**Racial Composition**  
**by Sub-Area of the County**  
**(1980)**

|                                   | <u>West</u>        | <u>Central</u>     | <u>East</u>       | <u>Total County</u> |
|-----------------------------------|--------------------|--------------------|-------------------|---------------------|
| White                             | 111,438<br>(60.5%) | 335,605<br>(92.9%) | 87,585<br>(79.0%) | 534,628<br>(81.5%)  |
| Black                             | 47,287<br>(25.7)   | 4,278<br>(1.2)     | 8,607<br>(7.8)    | 60,172<br>(9.2)     |
| American Indian<br>Eskimo & Aleut | 1,304<br>(0.7)     | 1,510<br>(0.4)     | 1,076<br>(1.0)    | 3,890<br>(0.6)      |
| Asian                             | 13,780<br>(7.5)    | 12,944<br>(3.6)    | 3,839<br>(3.5)    | 30,563<br>(4.7)     |
| Other Races                       | 10,342<br>(5.6)    | 7,055<br>(2.0)     | 9,730<br>(8.8)    | 27,127<br>(4.1)     |
| Total                             | 184,151<br>(100)   | 361,392<br>(100)   | 110,837<br>(100)  | 656,380<br>(100)    |
| Spanish Origin                    | 18,125<br>(9.9)    | 18,668<br>(5.2)    | 19,027<br>(17.2)  | 55,820<br>(8.5)     |

Source: U.S. Bureau of the Census, 1980.

Note: Spanish Origin may include other racial categories.

Projections by the Association of Bay Area Governments and the California Department of Finance indicate that the overall portion of minorities in Contra Costa County is expected to increase during the 1980's, due primarily to the influx of Asian families and other non-Black, non-Hispanic ethnic residents which are counted in the "Other Races" category (see Table 51). While the number of blacks in the County is expected to rise from approximately 60,000 residents in 1980 to an estimated 87,000 population in 1990, the number of Asians, Pacific Islanders, American Indians, and "other" residents should grow from about 62,000 to a projected 100,000 residents.

Table 51  
Projected Racial Composition  
in Contra Costa County  
(1990)

|                        | <u>Population</u> | <u>% of Total</u> |
|------------------------|-------------------|-------------------|
| White (incl. Hispanic) | 590,000           | 75.9%             |
| Black                  | 87,000            | 11.2              |
| Asian-Pacific/Other    | 100,000           | 12.9              |
| Total                  | 777,000           | 100.0             |

Source: Association of Bay Area Governments;  
California Department of Finance.

Specific communities have pockets of high concentrations of minority populations (see Table 52). For example, Pittsburg and Richmond's populations were 20% and 48% Black, respectively, while Hercules had 37% Asian and Pacific Islander, and Brentwood had 40% of the population made up of persons of Spanish Origin.

Table 52  
Racial Percentage Distribution by Community  
(1980)

| <u>Jurisdiction</u> | <u>Total<br/>Population</u> | <u>White</u> | <u>Black</u> | <u>Am. Indian,<br/>Eskimo,<br/>&amp; Aleut</u> | <u>Asian &amp;<br/>Pacific</u> | <u>Other</u> | <u>Spanish<br/>Origin*</u> |
|---------------------|-----------------------------|--------------|--------------|--|--------------------------------|--------------|----------------------------|
| Antioch             | 42,683                      | 89.45%       | 1.23%        | 1.02%  | 2.20%                          | 6.10%        | 14.84%                     |
| Brentwood           | 4,434                       | 75.73        | 0.07         | 0.97   | 1.62                           | 21.60        | 39.54                      |
| Clayton             | 4,325                       | 94.57        | 1.04         | 0.46   | 2.54                           | 1.39         | 4.74                       |
| Concord             | 103,251                     | 90.53        | 1.67         | 0.55   | 4.49                           | 2.76         | 7.20                       |
| El Cerrito          | 22,731                      | 71.41        | 9.70         | 0.26   | 16.18                          | 2.45         | 4.65                       |
| Hercules            | 5,963                       | 45.70        | 12.36        | 0.42   | 36.63                          | 4.90         | 10.77                      |
| Lafayette           | 20,879                      | 95.44        | 0.42         | 0.19   | 2.88                           | 1.08         | 2.65                       |
| Martinez            | 22,582                      | 91.67        | 1.97         | 0.63   | 3.05                           | 2.68         | 7.64                       |
| Moraga              | 15,014                      | 92.82        | 0.90         | 0.09   | 4.51                           | 1.69         | 3.03                       |
| Pinole              | 14,253                      | 86.88        | 4.27         | 0.83   | 5.02                           | 3.00         | 7.78                       |
| Pittsburg           | 33,034                      | 61.39        | 20.19        | 0.74   | 6.78                           | 10.89        | 18.78                      |
| Pleasant Hill       | 25,124                      | 93.36        | 1.05         | 0.43   | 3.06                           | 2.10         | 5.57                       |
| Richmond            | 74,676                      | 39.72        | 47.94        | 0.61   | 4.88                           | 6.85         | 10.33                      |
| San Pablo           | 19,750                      | 68.41        | 15.80        | 1.28   | 4.56                           | 9.95         | 16.99                      |
| Walnut Creek        | 53,643                      | 93.72        | 0.75         | 0.23   | 3.91                           | 1.40         | 3.31                       |
| Unincorporated      | 194,034                     | 88.87        | 3.82         | 0.64   | 3.41                           | 3.27         | 7.46                       |

|                        |         |       |      |      |      |      |      |
|------------------------|---------|-------|------|------|------|------|------|
| Contra Costa<br>County | 656,380 | 81.45 | 9.17 | 0.59 | 4.66 | 4.13 | 8.50 |
|------------------------|---------|-------|------|------|------|------|------|

\* "Persons of Spanish Origin" is not considered a racial identity; some are listed as white race, Spanish origin, etc.

Source: U.S. Bureau of Census, 1980



## Disabled Populations

Precise figures on the number of physically handicapped are not available. According to the 1980 census, of the Contra Costa County population over age 65, 14.2% had disabilities which prohibited them from using public transportation (Table 53). This percentage was higher in East County (19.0%) and West County (16.7%). Of the population aged 16-64, 4.5% had work disabilities and were not in the labor force (Table 54). The proportions of the working age population in this category were also the highest in East County and West County. An additional 2.9% of the working age population had work disabilities but were in the labor force.

According to the 1980 Census, an estimated 3.38% of the population over 16 in the unincorporated County have reported a public transportation disability, a slightly larger percentage compared to the total County - 3.14%. An estimated 4.8% of the unincorporated County population reported a disability that prevented them from working, a slightly larger percentage than the total County - 4.1%.

Table 53  
Public Transportation Disability for the  
Population Aged 16-64 and 65+  
and Percent of Total by Sub-Area of the County  
(1980)

|              | <u>16-64</u> | <u>% of<br/>Total</u> | <u>65+</u> | <u>% of<br/>Total</u> |
|--------------|--------------|-----------------------|------------|-----------------------|
| West         | 3,283        | 2.7%                  | 3,027      | 16.7%                 |
| Central      | 2,649        | 1.1                   | 3,811      | 12.3%                 |
| East         | 1,476        | 2.1                   | 1,344      | 19.0                  |
| Total County | 7,408        | 1.7                   | 8,192      | 14.2                  |

Source: U.S. Bureau of the Census, 1980.

Table 54  
Work Disability of Population  
Aged 16-64  
(1980)

|              | <u>In Labor Force</u><br><u>% of Population</u><br><u>Age 16-64</u> |      | <u>Not in Labor Force</u><br><u>% of Population</u><br><u>Age 16-64</u> |      |
|--------------|---|------|---|------|
| West         | 3,953   | 3.2% | 9,201   | 7.5% |
| Central      | 6,611   | 2.7  | 6,682   | 3.1  |
| East         | 2,558   | 3.6  | 5,107   | 7.2  |
| Total County | 13,122  | 2.9% | 21,990  | 4.5% |

Source: U.S. Bureau of the Census, 1980.

### Female Headed Households

Over 24% of the households in Contra Costa County were headed by a female in 1980 (Table 55). The percentage of female-headed households was as low as 21.7% in East County and as high as 29.5% in West County. In West County, 9.1% of the households were female-headed with children in 1980, as compared to 5.0% in Central County. Women tend to work in lower paid occupations and even when in the same occupations as men are generally lower paid. According to a report prepared by the California Employment Development Department, in Contra Costa County women earn 53% of men's earnings compared to 59% nationwide. Women make up the majority of the county's economically disadvantaged population and often have minor children for which they are responsible. A high proportion (72%) of the Section 8 subsidized housing program is used to provide housing for female headed households within the county.

Table 55  
Number and Frequency of  
Female Headed Households  
(1980)

|                          | <u>Number<br/>of FHH</u> | <u>% of Total<br/>Households</u> | <u>Number of FHH<br/>With Children</u> | <u>% of Total<br/>Households</u> |
|--------------------------|--------------------------|----------------------------------|--|----------------------------------|
| West                     | 20,536                   | 29.5%                            | 6,354                                  | 9.1%                             |
| Central                  | 29,892                   | 22.4%                            | 6,669                                  | 5.0%                             |
| East                     | 8,358                    | 21.7%                            | 2,936                                  | 7.6%                             |
| Unincorporated<br>County | 10,385                   | 19.8%                            |  |                                  |
| Total County             | 58,787                   | 24.3%                            | 15,959                                 | 6.6%                             |

Source: U.S. Bureau of the Census, 1980.

## VI. Housing Characteristics

### Number and Type of Housing Units

As already noted in a previous section of this report, the housing stock in Contra Costa County is composed predominately of single family homes; an estimated 71% of the housing in the County in January, 1990 was single family homes (see Tables 56 and 57). Only 2% of the housing is provided by mobile homes, located in either mobile home parks and on individual parcels. Multiple family housing (apartments) of two units (duplexes) or more comprises 25% of the housing stock.

Table 56  
Number and Percent Distribution of Housing Units  
by Type of Housing and  
Sub-Area of the County  
(as of 1/1/90)

|                          | <u>Single<br/>Family(1)</u>  | <u>Multiple<br/>(2 to 4<br/>Units)</u> | <u>Multiple<br/>(5 or more<br/>Units)</u> | <u>Mobile<br/>Homes</u> | <u>Total</u>       |
|--------------------------|--|--|---|-------------------------|--------------------|
| West                     | 59,493   | 9,601                                  | 12,176                                    | 1,284                   | 82,554             |
| Central                  | 121,119  | 9,317                                  | 33,513                                    | 2,383                   | 166,332            |
| East                     | 42,578   | 3,892                                  | 7,383                                     | 2,485                   | 56,338             |
| Total                    | 223,190<br>(70.9)  | 22,810<br>(7.2)                        | 53,072<br>(16.9)                          | 6,152<br>(2.0)          | 314,723<br>(100.0) |
| Unincorporated<br>County | 48,001   | 3,103                                  | 5,245                                     | 2,740                   | 59,089             |
| Source:                  | U.S. Bureau of the Census, 1980; update to 1989 by<br>Contra Costa County Community Development Department |  |   |                         |                    |

Note: (1) "Single Family" category includes attached homes  
(condominiums and townhouses).

The distribution of housing types has remained essentially the same since 1980.

In 1990, the unincorporated County had a greater percentage of single family units than the County as a whole - 81% as compared to 71%, - a lower percentage of multiples - 14.1% as compared to 24.1%, - and a higher percentage of mobile homes - 4.6% as compared to 2.0%.

Table 57  
Housing Type Distribution  
by Sub-Area of County

|            | <u>Single<br/>Family</u> | <u>2-4<br/>Dwelling<br/>Units</u> | <u>Multiple<br/>(5 or more<br/>units)</u> | <u>Mobile<br/>Home</u> |
|------------|--------------------------|-----------------------------------|---|------------------------|
| West       | 72.1%                    | 11.6%                             | 14.8%                                     | 1.6%                   |
| Central    | 72.8%                    | 5.6%                              | 20.2%                                     | 1.4%                   |
| East       | 75.6%                    | 6.9%                              | 13.1%                                     | 4.4%                   |
| Uninc. Co. | 81.2%                    | 5.2%                              | 8.9%                                      | 4.6%                   |
| Total      | 70.9%                    | 7.2%                              | 16.9%                                     | 2.0%                   |

Source: U.S. Bureau of the Census, 1980; update by Contra  
Costa County Community Development Department,  
January 1, 1990.



## Housing Tenure

Homeownership has been on a decline since 1980 nationwide, from 65.6% in 1980 to 63.8% in 1988, a reversal of a previous trend of increasing homeownership. The decline has been particularly true for younger households unable to break into the ownership market. According to the National Association of Homebuilders, this is due primarily to a decrease in married households which tend to have high homeownership rates despite an increase in the number of persons in the age groups which are typically home buyers. Other factors discouraging homeownership include high interest rates, low income growth, and tax law changes.

The county's housing stock consisted of 68.3% owner-occupied and 31.7% renter-occupied units in 1980. Tenure within the county has varied historically, although since 1960 it has been relatively steady with approximately seven of every ten households being owner-occupied (Table 58). The percentage of homeownership increased until 1960 when it reached a peak of 72.7% of the households. It has slightly decreased since 1960, partly as a result of an increase in construction of apartment structures during the 1960's, and more recently, due to the high cost of home ownership.

The proportion of renters grew slightly in each of the county sub-markets between 1975 and 1980 (Table 59). The percentage of renters was highest in West County where 36.7% of the housing units were occupied by renters. Central County was the lowest with 29.3% renter households.

Tenure will also vary by sub-groups of the population. Family size affects tenure (Table 59B). Not surprisingly, the majority of one-person households are renters. All other household sizes have an incidence of homeownership that exceeds the incidence of homeownership among all households - 68.3%. Large families were particularly likely to be homeowners.

Tenure among racial groups also varies (Table 59C). Asian households had the highest percentage of owner occupancy - 78.4%. This is a full ten percentage points higher than the average for all households in the County. White households also exceeded the County average with 70.6% being homeowners. All racial groups except black households were predominantly homeowners. Over 52% of black households were renters.

Elderly households (65 or over) also exceeded the County average for homeownership. Over 74% of elderly households were homeowners (Table 59D).

Table 58  
Percentage of Homes Occupied  
by Tenure  
(1930-1980)

|      | <u>% Owner</u> | <u>% Renter</u> |
|------|----------------|-----------------|
| 1930 | 51.3%          | 48.7%           |
| 1940 | 52.2           | 47.8            |
| 1950 | 55.3           | 44.7            |
| 1960 | 72.7           | 27.3            |
| 1970 | 69.4           | 30.6            |
| 1975 | 69.3           | 30.7            |
| 1980 | 68.3           | 31.7            |

Source: U.S. Census Bureau; 1975 Special  
Census of Contra Costa County

Table 59 A  
Percentage of Housing Units Occupied  
by Tenure and County Sub-Area  
(1975 and 1980)

|                          | <u>1975</u>  |               | <u>1980</u>  |               |
|--------------------------|--------------|---------------|--------------|---------------|
|                          | <u>Owner</u> | <u>Renter</u> | <u>Owner</u> | <u>Renter</u> |
| West County              | 66.2%        | 33.8%         | 63.3%        | 36.7%         |
| Central County           | 71.7         | 28.2          | 70.7         | 29.3          |
| East County              | 69.6         | 30.4          | 68.8         | 31.2          |
| Unincorporated<br>County | 78.1         | 21.9          | 75.7         | 24.3          |
| Total County             | 69.3         | 30.7          | 68.3         | 31.7          |

Source: U.S. Bureau of the Census, 1980;  
1975 Special Census.

#### Age of Housing

Physical deterioration of the county's housing stock, in a general sense, is not a severe problem because little of the housing stock is extremely old. However, much of the housing built at the beginning of the growth era will soon reach an age at which deterioration will become a problem. However, high concentrations of physical blight exist in the County, primarily in the areas of Pittsburg, Richmond and San Pablo. The age of the housing stock varies considerably from area to area (Table 60). In West County, approximately 52% of the housing units was built before 1960, compared to about 27% in East and Central County. Of the county housing existing in January 1990, 45% had been constructed since 1970.

The 1980 Census revealed that 5,809 housing units within the unincorporated County were built for 1940. This represents approximately 9.8% of the housing units in the unincorporated County in 1990. This percentage is likely overstated because annexations between 1980 and 1990 undoubtedly included some other housing built before 1940. There is no way of determining the exact number so annexed.

Table 59B

Tenure by Household Size  
Total County (Percent) 1980

| <u>Household<br/>Size</u> | <u>Owners</u> | <u>Renters</u> |
|---------------------------|---------------|----------------|
| 1                         | 47.1%         | 52.9%          |
| 2                         | 70.6%         | 29.4%          |
| 3                         | 71.6%         | 28.4%          |
| 4                         | 80.3%         | 19.7%          |
| 5                         | 79.4%         | 20.6%          |
| 6+                        | 76.3%         | 23.7%          |

Source: U.S. Bureau of the Census, 1980.

Table 59C

Tenure by Race  
Total County (Percent) 1980

| <u>Race</u>                       | <u>Owner</u> | <u>Renter</u> |
|-----------------------------------|--------------|---------------|
| White                             | 70.6%        | 29.4%         |
| Black                             | 47.4%        | 52.6%         |
| American Indian<br>Eskimo & Aleut | 51.9%        | 48.1%         |
| Asian                             | 78.4%        | 21.6%         |
| Spanish origin                    | 58.9%        | 41.1%         |
| Other                             | 52.7%        | 47.3%         |

Source: U.S. Bureau of the Census, 1980.

Table 59D

Tenure of Elderly Households (65+)  
1980 (Percent)

|                           | <u>Owner</u> | <u>Renter</u> |
|---------------------------|--------------|---------------|
| Elderly (65+ yrs. of age) | 74.2%        | 25.8%         |

Source: U.S. Bureau of the Census, 1980.





Table 60  
Age of Housing  
(as of 1/1/90)

|         | <u>Up to 1960</u> | <u>1960-69</u>  | <u>1970-79</u>  | <u>1980-89</u>  | <u>Total</u>   |
|---------|-------------------|-----------------|-----------------|-----------------|----------------|
| West    | 44,401<br>52.2%   | 16,280<br>19.2% | 11,254<br>13.2% | 13,067<br>15.4% | 85,002<br>100% |
| Central | 46,144<br>27.3    | 42,509<br>25.1  | 49,888<br>29.4  | 30,636<br>18.1  | 169,177<br>100 |
| East    | 16,514<br>27.0    | 7,764<br>12.7   | 17,027<br>27.8  | 19,821<br>32.4  | 61,126<br>100  |
| Total   | 107,059           | 66,553          | 78,169          | 63,524          | 315,305        |
| County  | 34.0              | 21.7            | 24.8            | 20.1            | 100            |

Source: U.S. Bureau of the Census; Contra Costa County Community  
Development Department

### Structural Condition

The U.S. Census Bureau in its 1985 Housing Survey found that 1 out of every 8 renters in the Bay Area lived in units with moderate to severe deferred maintenance problems. The California State University Real Estate and Land Use Institute conducted a study on the physical condition of California's housing stock in January of 1987. It estimated that 9% of Contra Costa County's housing stock, or 28,400 units, were in need of rehabilitation (representing repair costs of at least \$2,000) or replacement (i.e. repair costs exceeding 50% of the unit's value).

According to a survey conducted by the Contra Costa Redevelopment Agency in 1987, 200 residential structures in the North Richmond Redevelopment area were in need of rehabilitation. An additional 99 residences were in such disrepair that rehabilitation was not financially viable, i.e. the units needed to be replaced. Between 1985 and 1990, 50-55 structures have been publicly or privately abated in the North Richmond area.

The County's 1990 Housing Assistance Plan (based on 1980 Census data) identified 4,537 substandard housing units, 4,082 of which were in need of rehabilitation and 455 of which were in need of replacement. These estimates do not include Antioch, Concord, Richmond and Walnut Creek.

Every year more units become substandard due to age, lack of maintenance, neglect and natural catastrophe (fire, landslide, earthquake, etc.) Several thousand additional homes have suffered earthquake damage in early 1990.

The unincorporated County represents 31.6% of the housing units covered by the 1990 housing assistance plan. Assuming a pro rata distribution, 1,434 of the substandard housing units would be within the unincorporated County, 1,290 of which were in need of rehabilitation and 144 in need of replacement.

### Overcrowding

Overcrowding is defined as households having more than one person per room. The incidence of overcrowding in the unincorporated County is slightly greater than in the County as a whole - 3.4% as compared to 2.9%

According to the results of the 1980 census, in Central County, only 1.3% of the housing stock was considered overcrowded, while in West County 5.0% of all housing units was overcrowded and in East County 4.8% was overcrowded (Table 61). Overcrowding tends to occur at a higher rate in rental housing, with 4.9% of all rental units experiencing overcrowded conditions compared to 2.0% of all owner-occupied housing (Table 62).

**Table 61**  
**Overcrowding by County Sub-Area**  
**(Persons Per Room by Number & Percent)**  
**(1980)**

| <u>Persons per Room</u> | <u>West</u>   | <u>%</u>     | <u>Central</u> | <u>%</u>     | <u>East</u>   | <u>%</u>     | <u>Total County</u> | <u>%</u>     | <u>Unincorporated County</u> | <u>%</u>   |
|-------------------------|---------------|--------------|----------------|--------------|---------------|--------------|---------------------|--------------|------------------------------|------------|
| Less than 1.00          | 66,088        | 95.0         | 131,673        | 98.7         | 36,739        | 95.2         | 234,500             | 97.1         | 44,902                       | 96.8       |
| 1.01 to 1.50            | 2,383         | 3.4          | 1,205          | 0.9          | 1,234         | 3.2          | 4,822               | 2.0          | 1,002                        | 2.4        |
| 1.51+                   | 1,101         | 1.6          | 483            | 0.4          | 628           | 1.6          | 2,212               | 0.9          | 460                          | 1.0        |
| <b>Total</b>            | <b>69,572</b> | <b>100.0</b> | <b>133,361</b> | <b>100.0</b> | <b>38,601</b> | <b>100.0</b> | <b>241,534</b>      | <b>100.0</b> | <b>46,364</b>                | <b>100</b> |

Source: U.S. Bureau of the Census, 1980

**Table 62**  
**Overcrowding by Tenure: Renter vs. Homeowner**  
**(Persons Per Room)**  
**(1980)**

| <u>Persons per Room</u> | <u>West</u>   |              | <u>Central</u> |              | <u>East</u>   |              | <u>Total County</u> |              | <u>Unincorporated County</u> |              |
|-------------------------|---------------|--------------|----------------|--------------|---------------|--------------|---------------------|--------------|------------------------------|--------------|
|                         | <u>Renter</u> | <u>Owner</u> | <u>Renter</u>  | <u>Owner</u> | <u>Renter</u> | <u>Owner</u> | <u>Renter</u>       | <u>Owner</u> | <u>Renter</u>                | <u>Owner</u> |
| Less than 1.00          | 92.6%         | 96.4%        | 97.6%          | 99.2%        | 91.8%         | 96.7%        | 95.1%               | 98.0%        | 94.3%                        | 97.7%        |
| 1.01 to 1.50            | 4.8           | 2.6          | 1.5            | 0.7          | 4.9           | 2.4          | 3.1                 | 1.5          | 3.5                          | 1.7          |
| 1.51 +                  | 2.6           | 1.0          | 0.8            | 0.2          | 3.3           | 0.9          | 1.8                 | 0.5          | 2.1                          | .6           |

Source: U.S. Bureau of the Census, 1980



### Vacancy Rates

Vacancy rates are an indicator of the health of the housing market. Overall, for the housing market to operate efficiently, vacancy rates should be at least 5%. Vacancy rates in the county have been significantly below those rates for a number of years (Table 63). Vacancy rates in the County for all units combined ranged from 1.7 to 1.9 from 1981 to 1984 and increased slightly between 1985 and 1988.

**Table 63**  
**Housing Vacancy Rates**  
**by Type and Year**

|      | <u>Single-Family<br/>Detached</u> | <u>Single-Family<br/>Attached</u> | <u>Multi-Family<br/>Units</u> | <u>Total</u> |
|------|-----------------------------------|-----------------------------------|-------------------------------|--------------|
| 1985 | 1.4                               | 3.6                               | 4.1                           | 2.1          |
| 1986 | 1.4                               | 3.8                               | 4.8                           | 2.3          |
| 1987 | 1.4                               | 3.6                               | 5.3                           | 2.6          |
| 1988 | 1.6                               | 4.0                               | 5.4                           | 2.7          |

Source: Federal Home Loan Bank of San Francisco and U.S. Postal Service. Vacancy rates are for September of each year. FHLB discontinued its Housing Vacancy Surveys in 1988.

1

2 Single family attached units include townhouse and duplex units.  
Multifamily units include apartment buildings and condominiums.

### Overpayment

Overpayment for housing occurs when a renter pays more than 30% of the gross household income for housing expenses, including rent, utilities and fuel, or when a homeowner pays over 35% for mortgage payments, homeowner association fees, insurance, taxes, utilities and fuel.

As indicated in Tables 64 and 65, over 40 percent of the county's renters were paying over 30% of their household income for housing expenses in 1980. In comparison, only 13.9%, or 9,760, of county homeowners were paying over 35% of their income for housing at the time of the last census.

The unincorporated County has a slightly larger percentage of its homeowners overpaying than does the County as a whole - 14.5% versus 13.9%, and a significantly smaller percentage of its renters overpaying compared to the County as a whole - 29.5% compared to 40.8%.

**Table 64**  
**Proportion of Renters Paying Over**  
**30% of Their Total Household Income for Housing**  
**by Income Category**  
**(1980)**

|                                | <u>\$0<br/>to<br/>\$4,999</u> | <u>\$5,000<br/>to<br/>\$9,999</u> | <u>\$10,000<br/>to<br/>\$14,999</u> | <u>\$15,000<br/>to<br/>\$19,999</u> | <u>\$20,000+</u> | <u>All<br/>Renters</u> |
|--------------------------------|-------------------------------|-----------------------------------|-------------------------------------|-------------------------------------|------------------|------------------------|
| West                           | 84.6%                         | 68.5%                             | 34.6%                               | 13.7%                               | 3.2%             | 40.8%                  |
| Central                        | 86.1                          | 85.7                              | 55.0                                | 25.7                                | 6.1              | 40.0                   |
| East                           | 83.9                          | 65.9                              | 32.5                                | 16.9                                | 5.0              | 43.8                   |
| Total County                   | 84.5                          | 75.8                              | 44.5                                | 20.6                                | 5.2              | 40.8                   |
| Unincorporated<br>County Total | 85.6                          | 52.4                              | 22.5                                | 6.5                                 | 0.2              | 29.5                   |

Source: Estimated from 1980 U.S. Bureau of the Census data.

Table 65  
Proportion of Owners Paying over  
35% of Their Total Household Income for Housing  
by Income Category  
(1980)

|                                | \$0<br>to<br>\$4,999 | \$5,000<br>to<br>\$9,999 | \$10,000<br>to<br>\$14,999 | \$15,000<br>to<br>\$19,999 | \$20,000+ | All<br>Renters |
|--------------------------------|----------------------|--------------------------|----------------------------|----------------------------|-----------|----------------|
| West                           | 53.9%                | 27.7%                    | 34.6%                      | 16.9%                      | 3.6%      | 12.1%          |
| Central                        | 75.0                 | 46.6                     | 33.8                       | 29.0                       | 8.4       | 14.5           |
| East                           | 60.6                 | 28.3                     | 25.8                       | 25.7                       | 5.5       | 13.8           |
| Total County                   | 62.1                 | 34.3                     | 23.8                       | 23.8                       | 7.0       | 13.9           |
| Unincorporated<br>County Total | 56.6                 | 29.2                     | 24.5                       | 24.3                       | 8.3       | 29.5           |

Source: Estimated from 1980 U.S. Bureau of the Census data.

#### Home Sales Market

While enough vacant land exists in Contra Costa County to provide housing for future generations, many young families and other groups will find it very difficult to purchase these new homes, based upon current sales prices and interest rates. The dilemma of very high housing costs effectively pricing many potential homebuyers out of the market is not peculiar to Contra Costa County, or even the San Francisco Bay Area, but is part of a statewide problem. As of May 1989, the California Association of Realtors (CAR) estimated that Contra Costa County average home prices were \$196,242 versus \$267,634 Bay Area wide. In November of 1989, CAR estimated the median sales price of a single family detached home in Contra Costa County was \$261,908, a 13.6% increase over one year earlier.

There are a number of sources for sales price data. REM Reports presents sales price data from all recorded transactions over a one-week period. Dataman Services data, is based on all recorded transactions over a one-year period, disaggregated by new versus existing home sales. Board of Realtors data includes all sales of properties listed in the Multiple Listing Service (MLS), which excludes many new developments as well as existing homes. A Spear Street Advisors March 1989 study of home sales in Contra Costa County indicates that 26,131 residential properties were sold in 1988, 5,956, or 22.8% of which were new homes. Since Board of Realtors data is based on 9,621 sales in 1988 from properties listed in the Multiple Listing Service, it appears that only a third of all sales are included in the MLS database. Board of Realtors sales price estimates also differ from other data sources in providing average sales prices, rather than median sales prices, which are less skewed by extremely high or low priced sales.



However, Board of Realtors data is useful because of its breakdown into separate categories for detached and attached (townhouses/condominiums) homes. This is important since single family detached homes sell for more than condominiums with similar amenities, so that variations in average sales prices from one community to the next could be a factor of the mix of condominiums versus single family homes, rather than geographic differences in home values. Statewide, CAR estimates that single family homes averaged \$210,000 and condominiums/townhomes averaged \$151,000, or \$189,000 for overall units.

There is a wide range of sales prices of homes in Contra Costa County from one community to the next (see Tables 66 and 67). Based upon the most recent data from local realtors, the most expensive detached single family units are found in the Blackhawk and Diablo areas (with average sales prices of \$614,354 and \$649,000, respectively) and Alamo (average sales price of \$555,836). The only community with average home sales prices below \$100,000 are Point Richmond (\$92,500) and North and West Richmond (\$75,996).

Average condominium sales prices remain available below \$100,000 only in Antioch, Concord, Oakley, and Pittsburg with \$78,226, \$84,889, \$80,000 and \$94,861 prices respectively. Condominiums/townhomes in the Alamo, Blackhawk, and Orinda areas have average sales prices of over \$200,000 (\$200,035, \$287,767, and \$280,050 respectively).

Table 66  
Average Residential Sales Prices  
by East and Central County Areas  
December 1989

|   | <u>Homes</u> | <u>Townhouses/Condos</u> |
|---|--------------|--------------------------|
| <u>Central County</u>                         |              |                          |
| Alamo   | \$555,836    | \$200,035                |
| Blackhawk                                     | 614,354      | 287,767                  |
| Clayton                                       | 267,312      | 149,483                  |
| Concord                                       | 189,362      | 84,889                   |
| Danville                                      | 374,295      | 176,184                  |
| Diablo  | 649,000      | N/A                      |
| Lafayette                                     | 427,793      | 199,783                  |
| Martinez/Pacheco                              | 192,791      | 116,383                  |
| Moraga  | 440,198      | 183,108                  |
| Orinda  | 463,125      | 280,050                  |
| Pleasant Hill                                 | 231,443      | 139,818                  |
| San Ramon                                     | 303,461      | 154,245                  |
| Walnut Creek                                  | 312,233      | 134,430                  |
| <u>East County</u>                            |              |                          |
| Antioch                                       | 139,410      | 78,226                   |
| Oakley  | 149,773      | 80,000                   |
| Pittsburg                                     | 116,816      | 94,861                   |
| Brentwood, Knightsen,<br>Bethel Island, Byron | 263,911      | 131,271                  |

Source: Contra Costa Board of Realtors, Statistical Report (Multiple Listing Service)

**Table 67**  
**Average Residential Sales Prices in West County**  
**December, 1989**

West County

|                       |           |
|-----------------------|-----------|
| Crockett              | \$135,000 |
| Rodeo                 | 165,908   |
| Hercules              | 182,193   |
| Pinole                | 161,103   |
| Tara Hills            | 164,500   |
| Bayview Park          | 165,000   |
| Montalvin Manor       | N/A       |
| El Sobrante           | 183,125   |
| El Sobrante/Richmond  | 233,875   |
| Hilltop               | 130,000   |
| College               | 140,333   |
| San Pablo             | 122,617   |
| North & East Richmond | 150,783   |
| Richmond View         | 179,992   |
| Pt. Richmond          | 92,500    |
| North & West Richmond | 75,996    |
| South Richmond/Balboa | 126,333   |
| Bay Front             | 137,500   |
| Richmond Annex        | N/A       |
| El Cerrito            | 263,150   |
| Combined West County  | 161,388   |

Source: West County Board of Realtors

Spear Street Advisors data for 1988 indicated that Alamo, Danville, Lafayette, Moraga and Orinda were the highest priced areas in terms of median sales prices, with El Sobrante, Oakley, Pittsburg, Richmond, and San Pablo as the lowest priced areas (See Table 68).

**Table 68**  
**1988 Median Residential Sales Prices**  
**by Contra Costa County Areas**  
**for Resale and New Units**

|                       | <u>Resale Units</u> | <u>New Units</u>   | <u>Total Units</u> |
|-----------------------|---------------------|--------------------|--------------------|
| <u>West County</u>    |                     |                    |                    |
| El Cerrito            | 180-189,999         | 160-169,999*       | 180-189,999        |
| El Sobrante           | 110-119,000         | Over 250,000*      | 110-119,999        |
| Hercules              | 140-149,999         | 140-149,999        | 140-149,999        |
| Pinole                | 130-139,999         | 150-159,999        | 140-149,999        |
| Richmond              | 100-109,999         | 200-209,999        | 110-119,999        |
| Rodeo                 | 120-129,999         | 220-229,999*       | 120-129,999        |
| San Pablo             | 90-99,999           | 130-139,999*       | 90-99,999          |
| <u>Central County</u> |                     |                    |                    |
| Alamo                 | Over \$250,000      | Over \$250,000     | Over \$250,000     |
| Clayton               | 200-209,999         | Over 250,000       | 210-219,999        |
| Concord               | 130-139,999         | 200-209,999        | 130-139,999        |
| Danville              | Over 250,000        | Over 250,000       | Over 250,000       |
| Lafayette             | Over 250,000        | 240-249,999        | Over 250,000       |
| Martinez              | 120-129,999         | 170-179,999        | 130-139,999        |
| Moraga                | Over 250,000        | Over 250,000       | Over 250,000       |
| Orinda                | Over 250,000        | Over 250,000       | Over 250,000       |
| Pleasant Hill         | 140-149,999         | 220-229,999        | 160-169,999        |
| San Ramon             | 210-219,999         | Over 250,000       | 230-239,999        |
| Walnut Creek          | 180-189,999         | 170-179,999        | 180-189,999        |
| <u>East County</u>    |                     |                    |                    |
| Antioch               | 100-109,999         | 140-149,999        | 120-129,999        |
| Brentwood             | 120-129,999         | 130-139,999        | 130-139,999        |
| Byron                 | 210-219,999         | 180-189,999        | 200-209,999        |
| Oakley                | 100-109,999         | 120-129,999        | 110-119,999        |
| Pittsburg             | 90-99,999           | 120-129,999        | 100-109,999        |
| <b>Total County</b>   | <b>140-149,999</b>  | <b>170-179,999</b> | <b>140-149,999</b> |

Source: Dataman Information Services Inc., Spear Street Advisors, Inc.  
(included in Feasibility Report for 1989 Contra Costa County Home  
Mortgage Revenue Bonds)

\* Numbers may not be representative due to small sample size.

County-wide median sales prices from Spear Street Advisors for 1988 were approximately \$140,000 for resale units, \$170,000 for new units and \$150,000 for new and resale units combined (see Table 69). Resale units sold for an average of 18% less than new units. More significant, however, is that a significant portion of resale units were available at prices below \$100,000 - 27% of resale units as compared to only 6% of new units. At the other extreme, a third of all new units sold for over \$200,000 in 1988. Affordable homeownership opportunities for low income households without any public subsidies appear to be supplied exclusively by the resale market.



Table 69  
Distribution of Home Sales Prices for Resale and New Units  
Contra Costa County  
(1988)

| Price Categories  | Resale Housing        |                        |                            | New Housing           |                        |                            | Totals                |                        |                            |
|-------------------|-----------------------|------------------------|----------------------------|-----------------------|------------------------|----------------------------|-----------------------|------------------------|----------------------------|
|                   | Number<br>of<br>Units | Percent<br>of<br>Total | Cumula-<br>tive<br>Percent | Number<br>of<br>Units | Percent<br>of<br>Total | Cumula-<br>tive<br>Percent | Number<br>of<br>Units | Percent<br>of<br>Total | Cumula-<br>tive<br>Percent |
| Below \$50,000    | 1,971                 | 9.77%                  | 9.77%                      | 4                     | 0.07%                  | 0.07%                      | 1,975                 | 7.56%                  | 7.56%                      |
| 50,000 - 59,000   | 438                   | 2.17%                  | 12.94%                     | 12                    | 0.02%                  | 0.27%                      | 450                   | 1.72%                  | 9.28%                      |
| 60,000 - 69,000   | 603                   | 2.99%                  | 14.93%                     | 21                    | 0.35%                  | 0.62%                      | 624                   | 2.39%                  | 11.67%                     |
| 70,000 - 79,000   | 681                   | 3.38%                  | 18.30%                     | 69                    | 1.16%                  | 1.78%                      | 750                   | 2.87%                  | 14.54%                     |
| 80,000 - 89,000   | 840                   | 4.16%                  | 22.47%                     | 91                    | 1.53%                  | 3.31%                      | 931                   | 3.56%                  | 18.10%                     |
| 90,000 - 99,000   | 961                   | 4.76%                  | 27.23%                     | 166                   | 2.79%                  | 6.09%                      | 1,127                 | 4.31%                  | 22.41%                     |
| 100,000 - 109,000 | 1,160                 | 5.75%                  | 32.98%                     | 257                   | 4.31%                  | 10.41%                     | 1,417                 | 5.42%                  | 27.84%                     |
| 110,000 - 119,999 | 1,188                 | 5.89%                  | 38.87%                     | 381                   | 6.40%                  | 16.81%                     | 1,546                 | 6.00%                  | 33.84%                     |
| 120,000 - 129,000 | 1,142                 | 5.66%                  | 44.53%                     | 511                   | 8.58%                  | 25.39%                     | 1,653                 | 6.33%                  | 40.17%                     |
| 130,000 - 139,000 | 1,077                 | 5.34%                  | 49.87%                     | 445                   | 7.47%                  | 32.86%                     | 1,522                 | 5.82%                  | 45.99%                     |
| 140,000 - 149,000 | 867                   | 4.30%                  | 54.17%                     | 393                   | 6.60%                  | 39.46%                     | 1,260                 | 4.82%                  | 50.81%                     |
| 150,000 - 159,000 | 761                   | 3.77%                  | 57.94%                     | 263                   | 4.42%                  | 43.87%                     | 1,024                 | 3.92%                  | 54.73%                     |
| 160,000 - 169,000 | 746                   | 3.70%                  | 61.64%                     | 286                   | 4.80%                  | 48.67%                     | 1,032                 | 3.95%                  | 58.68%                     |
| 170,000 - 179,000 | 703                   | 3.48%                  | 65.12%                     | 290                   | 4.87%                  | 53.54%                     | 993                   | 3.80%                  | 62.48%                     |
| 180,000 - 189,000 | 659                   | 3.27%                  | 68.39%                     | 236                   | 3.96%                  | 57.51%                     | 895                   | 3.43%                  | 65.91%                     |
| 190,000 - 199,000 | 489                   | 2.42%                  | 70.81%                     | 286                   | 4.80%                  | 62.31%                     | 775                   | 2.97%                  | 68.87%                     |
| 200,000 - 209,000 | 437                   | 2.17%                  | 72.98%                     | 228                   | 3.83%                  | 66.13%                     | 665                   | 2.54%                  | 71.42%                     |
| 210,000 - 219,000 | 451                   | 2.24%                  | 75.21%                     | 226                   | 3.79%                  | 69.93%                     | 677                   | 2.59%                  | 74.01%                     |
| 220,000 - 229,000 | 440                   | 2.18%                  | 77.39%                     | 232                   | 3.90%                  | 73.28%                     | 672                   | 2.57%                  | 76.58%                     |
| 230,000 - 239,000 | 368                   | 1.82%                  | 79.22%                     | 216                   | 3.63%                  | 77.45%                     | 584                   | 2.23%                  | 78.81%                     |
| 240,000 - 249,000 | 321                   | 1.59%                  | 80.81%                     | 168                   | 2.82%                  | 80.27%                     | 489                   | 1.87%                  | 80.69%                     |
| 250,000 and over  | <u>3,872</u>          | <u>19.19%</u>          | 100.00%                    | <u>1,175</u>          | <u>19.73%</u>          | 100.00%                    | <u>5,047</u>          | <u>19.31%</u>          | 100.00%                    |
|                   | 20,175                | 100.00%                |                            | 5,956                 | 100.00%                |                            | 26,131                | 100.00%                |                            |

Source: Dataman Information Service Inc.; Spear Street Advisors, Inc.

Spear Street Advisors data for 1988 shows the most overall sales activity in Antioch, Concord, Danville, Richmond, Walnut Creek (see Table 70). The most sales activity for existing homes occurred in Antioch, Concord, Danville, Martinez, Pittsburg, Richmond, San Ramon, and Walnut Creek. The most sales activity for new development in 1988 occurred in Antioch, Danville, Hercules, and San Ramon.

**Table 70**  
**1988 Number of Residential Sales by Sub-Areas**  
**of the County for Resale and New Units**

|                       | <u>Resale<br/>Units</u> | <u>New<br/>Units</u> | <u>Total</u>  |
|-----------------------|-------------------------|----------------------|---------------|
| <u>West County</u>    | <u>3,762</u>            |                      |               |
| El Cerrito            | 402                     | 5                    | 407           |
| El Sobrante           | 118                     | 2                    | 120           |
| Hercules              | 464                     | 591                  | 1,055         |
| Pinole                | 375                     | 142                  | 517           |
| Richmond              | 1,918                   | 462                  | 2,380         |
| Rodeo                 | 146                     | 2                    | 148           |
| San Pablo             | 339                     | 8                    | 347           |
| <u>Central County</u> | <u>11,661</u>           |                      |               |
| Alamo                 | 331                     | 48                   | 379           |
| Clayton               | 230                     | 31                   | 261           |
| Concord               | 2,956                   | 453                  | 3,409         |
| Danville              | 1,618                   | 679                  | 2,297         |
| Lafayette             | 690                     | 58                   | 748           |
| Martinez              | 1,157                   | 184                  | 1,341         |
| Moraga                | 441                     | 45                   | 486           |
| Orinda                | 523                     | 17                   | 540           |
| Pleasant Hill         | 484                     | 198                  | 682           |
| San Ramon             | 1,111                   | 563                  | 1,674         |
| Walnut Creek          | 2,120                   | 444                  | 2,564         |
| <u>East County</u>    | <u>3,162</u>            |                      |               |
| Antioch               | 1,155                   | 784                  | 1,939         |
| Brentwood             | 202                     | 140                  | 342           |
| Byron                 | 282                     | 201                  | 483           |
| Oakley                | 358                     | 459                  | 817           |
| Pittsburg             | 1,165                   | 234                  | 1,399         |
| <b>Total County</b>   | <b>20,175</b>           | <b>5,956</b>         | <b>26,131</b> |

Source: Spear Street Advisors, Inc., 1988 Housing  
Purchase Price Data for Contra Costa County,  
March 15, 1989

Appreciation in home values in the San Francisco Bay Area hit record levels in early 1988. The California Association of Realtors estimated that home prices in California rose 19.7% from 1988 to 1989 and in the region rose by an average of 24.8% during this same period. A San Francisco Examiner-Caldwell Banker survey estimated appreciation rates by tracing home values in Bay Area neighborhoods over a one-year period (See Table 72). In Contra Costa County, the greater increase in condominium sales prices occurred in Moraga and Pleasant Hill, where values escalated dramatically 44.5% and 47.0% from 1988 to 1989. At the other extreme, Antioch showed a decline in condominium sales prices of 7.2% over the same period and Concord realized zero appreciation. All of the communities surveyed in Contra Costa County had very high appreciation rates in detached single family homes with the exception of Martinez. According to the West County Board of Realtors, West County average sale prices have increased 83% in the five year period from December, 1984 to December, 1989.

Some of the appreciation in home values can be attributed to increases in amenities package provided in single-family homes. Size in particular has been somewhat contingent on the health of the economy; as interest rates have made housing more affordable, housing sizes have increased. New single-family homes have increasingly included second stories, garages, 2 or more bathrooms, and fireplaces.

More importantly, though, the double digit appreciation rates in home sales reflect a very tight housing market with demand far exceeding supply. One indicator of this is the amount of unsold inventory of homes on the market which the CAR reports hit its lowest level since 1982 in August 1988. However, while increased unit sizes ~~may~~ partially explain increased sales prices, local statistics from the Construction Industry Research Board indicate that housing values for new homes have escalated in Contra Costa County between 1981 and 1989, even on a cost per square foot basis.



Table 71  
Single Family Residential Appreciation Rates  
1984 -1989  
Contra Costa County

|  | <u>West County</u> | <u>South<br/>Central</u> | <u>East County</u> | <u>Bay Area<br/>&amp; Region</u> |
|--|--------------------|--------------------------|--------------------|----------------------------------|
| October '84 -<br>October, '85                | 2.8                | 3.2                      | 3.3                | 5.5                              |
| October '85 -<br>October, '86                | 7.5                | 5.3                      | 6.5                | 9.9                              |
| October '86 -<br>October, '87                | 5.1                | 9.3                      | 9.1                | 11.1                             |
| October '87 -<br>October, '88                | 12.2               | 13.8                     | 7.3                | 18.9                             |
| October '88 -<br>October, '89                | 25.3               | 21.9                     | 18.5               | 24.3                             |
| Cumulative<br>October, '84 -<br>October, '89 | 63.3               | 64.8                     | 52.4               | 90.4                             |

Source: Real Estate Research Council of Northern California, Northern California Real Estate Report, February, 1990.

West County sample included homes tracked in Richmond, Martinez, El Cerrito, and Pinole. South Central included Orinda, Moraga, Pleasant Hill, Walnut Creek, Alamo, Lafayette, Danville, and Concord. East County included Concord, Pittsburg, and Antioch.

**Table 72**  
**Appreciation in Home Values in Contra Costa County**  
**August, 1988 - August, 1989**

|               | Condominium |           |          | Single-family Residence |           |          |
|---------------|-------------|-----------|----------|-------------------------|-----------|----------|
|               | 1988        | 1989      | % Change | 1988                    | 1989      | % Change |
| Alamo         | \$176,500   | \$184,950 | 4.8%     | \$325,000               | \$425,000 | 30.8%    |
| Antioch       | 97,000      | 90,000    | -7.2%    | 126,000                 | 145,000   | 15.1%    |
| Blackhawk     | 279,000     | 289,000   | 3.5%     | 405,000                 | 474,000   | 17.0%    |
| Clayton       | 119,500     | 136,500   | 14.2%    | 213,000                 | 250,000   | 17.4%    |
| Concord       | 90,000      | 90,000    | 0%       | 172,500                 | 210,000   | 21.7%    |
| Danville      | 172,500     | 215,000   | 24.6%    | 274,950                 | 330,000   | 20.0%    |
| Diablo        | N.A.        | N.A.      | N.A.%    | 420,000                 | 500,000   | 19.0%    |
| El Cerrito    | N.A.        | N.A.      | N.A.%    | 220,300                 | 265,000   | 20.3%    |
| Kensington    | N.A.        | N.A.      | N.A.%    | 275,000                 | 329,000   | 19.7%    |
| Lafayette     | 175,000     | 220,000   | 25.8%    | 275,000                 | 350,000   | 27.3%    |
| Martinez      | 107,500     | 109,000   | 1.4%     | 187,500                 | 200,000   | 6.7%     |
| Moraga        | 119,000     | 175,000   | 47.0%    | 275,000                 | 340,000   | 23.6%    |
| Orinda        | 375,000     | 398,000   | 6.1%     | 300,000                 | 398,250   | 32.8%    |
| Pittsburg     | 78,000      | 87,000    | 14.1%    | 125,000                 | 145,000   | 16.0%    |
| Pleasant Hill | 128,000     | 185,000   | 44.5%    | 177,600                 | 230,000   | 29.5%    |
| San Ramon     | 140,000     | 162,000   | 15.7%    | 187,000                 | 245,000   | 31.0%    |
| Walnut Creek  | 159,000     | 178,500   | 12.3%    | 230,000                 | 283,000   | 27.4%    |
| Richmond View | N.A.        | N.A.      | N.A.%    | 177,000                 | 229,000   | 29.4%    |

Source: San Francisco Examiner - Caldwell Banker Residential Real Estate Survey

#### Homeownership Affordability

Affordability in homeownership is a function of sales price levels, household income levels, lender underwriting standards, and home mortgage interest rates.

**Table 73**  
**Bay Area Housing Affordability**

|  | <u>1980</u> | <u>1989</u> | <u>% Change</u> |
|--|-------------|-------------|-----------------|
| Median Household Income                        | \$ 20,608   | \$ 34,496   | 67.4            |
| Median Sales Price<br>(Single Family Detached) | \$110,163   | \$260,592   | 136.5           |
| Average Mortgage Rate                          | 13.11%      | 10.60       | -19.1           |
| Income Required to Buy                         | \$ 40,657   | \$ 85,661   | 110.7           |
| Percent Able to Afford                         | 14.2%       | 11%         | -22.5           |

Sources: Urban Decision Systems, California Association of Realtors, Federal Home Loan Bank Board, Bay Area Council

As Table 73 indicates, only 11% of Bay Area households could afford the median priced single family detached home in 1989, assuming a 20% downpayment and a 30 year fixed rate mortgage. While median household incomes have increased only 67% since 1980 and sales prices of single family homes have escalated 136% in that time period, affordability has declined despite lower mortgage interest rates. The fact remains that a very high income level of over \$85,000 per year is required to purchase the median priced single family home in the Bay Area.

**Table 74**  
**Mortgage Interest Rates**

|      | <u>Fixed Rate<br/>Loans (1)</u> | <u>Adjustable Rate<br/>Loans (2)</u> | <u>Tax Exempt Bond<br/>Financed Loans (3)</u> |
|------|---------------------------------|--------------------------------------|---|
| 1980 | 13.77                           | N/A                                  | 9.70  |
| 1981 | 16.64                           | N/A                                  | 12.39   |
| 1982 | 16.09                           | N/A                                  | 12.48   |
| 1983 | 13.23                           | N/A                                  | 10.03   |
| 1984 | 13.87                           | 12.35                                | 10.65   |
| 1985 | 12.42                           | 11.02                                | 9.68  |
| 1986 | 10.18                           | 9.45                                 | 8.04  |
| 1987 | 10.20                           | 8.69                                 | 8.15  |
| 1988 | 10.33                           | 8.93                                 | 8.12  |
| 1989 | 10.32                           | N/A                                  | 7.74  |

- (1) Federal Home Loan Mortgage Corporation. Survey of major lenders, rates on fixed rate, 80% loan to value mortgages.
- (2) Federal Home Loan Bank Board. Effective rates of 75% loan to value ARM's (including amortized value of points).
- (3) Smith Barney, "Credit Market Comment"

Source: Published in National Association of Home Builders,  
The Current Housing Situation



Interest rates have the greatest impact on home sales price affordability. Table 74 indicates changes in interest rates for fixed rate, adjustable rate, and tax exempt bond financed mortgage loans over the last decade. Adjustable rate financing provides fluctuating mortgage payments with initially lower rates tied to an interest rate established by an economic indicator with a cap on the maximum interest rate; while tax exempt bond financing provides below market rate fixed rate loans with low mortgage payments for the life of the loan.

Based on the California Association of Realtors estimate of \$261,908 for the median priced single family home in Contra Costa County in November of 1989, Contra Costa County households would need an annual income of \$95,857, assuming a 10% down payment of \$26,190, a 10% 30-year fixed rate mortgage, taxes and insurance at 1.5% of the sales price, and housing costs at 30% of income. Obviously, these prices are far beyond the reach of most Contra Costa County households.

Given the current lending practices of banks and saving and loans, to qualify for a loan to purchase the average priced \$200,000 home in Contra Costa County, the buyer would need an annual income of approximately \$73,000, assuming a 10% down payment (see Table 75). In order to qualify for a much less expensive \$100,000 home, the buyer would be required to have an income of over \$36,000. On the other end of the spectrum, to afford payments for a \$300,000 house, the buyer would need a combined income of over \$9,000 per month, or almost \$110,000 annually.

**Table 75**  
**Home Sales Price and Household Income Required**

| <u>Homes Sales Price</u> | <u>Downpayment</u> | <u>Gross Household Income<br/>Needed to Qualify for<br/>a Loan</u> |               |
|--------------------------|--------------------|--|---------------|
|                          |                    | <u>Monthly</u>   | <u>Annual</u> |
| \$ 80,000                | \$ 8,000           | \$2,440  | \$ 29,280     |
| \$100,000                | 10,000             | 3,049  | 36,593        |
| \$120,000                | 12,000             | 3,659  | 43,910        |
| \$140,000                | 14,000             | 4,269  | 51,230        |
| \$160,000                | 16,000             | 4,879  | 58,547        |
| \$180,000                | 8,000              | 5,489  | 65,867        |
| \$200,000                | 20,000             | 6,099  | 73,187        |
| \$250,000                | 25,000             | 7,623  | 91,480        |
| \$300,000                | 30,000             | 9,148  | 109,777       |

Source: Contra Costa County Community Development Department

Note: Assumes 10% down payment; 90% of sales price is amortized over 30 years at 10.0% interest rate; annual costs of property tax and insurance is 1.5% of sales price; monthly housing costs are 30% of gross family income. Calculations have been rounded off.

With a larger downpayment or alternative forms of financing, such as adjustable rate mortgage or mortgage revenue bond financing, monthly housing costs, and consequently the required income to qualify for a loan, would drop.

Table 76 illustrates that a two point difference in mortgage interest rates, or the difference between an 8% and a 10% interest rate, has more impact on monthly mortgage payment levels than a \$10,000 difference in the mortgage level based on a higher or lower downpayment amount. Likewise, in the example of a \$100,000 sales price, a \$10,000 difference in sales price would have the same impact on monthly mortgage payments as a \$10,000 difference in downpayment.

**Table 76**  
**Impact of Down Payment and Mortgage Interest Rates on**  
**Monthly Mortgage Payments**

| <u>Downpayment</u> | <u>Mortgage Interest Rate</u> |            |            |
|--------------------|-------------------------------|------------|------------|
|                    | <u>8%</u>                     | <u>10%</u> | <u>12%</u> |
| 10%                | \$660                         | \$790      | \$926      |
| 20%                | \$587                         | \$702      | \$823      |

Source: Contra Costa County Community Development Department

Assumes 30 year fixed rate mortgage on \$100,000 home.

The shortage of affordable housing has larger planning implications. As areas of the County fail to provide housing affordable to all income ranges, particularly for very low and low income households, these populations are forced to commute farther and farther distances between affordable housing and employment centers. The lack of affordable housing has direct negative impacts on transportation, air quality, and energy conservation/efficiency.

### Rental Market

The rental market has changed significantly since 1985. At that time, the housing market was extremely tight with low vacancy rates at 1% or less in the Bay Area. The Contra Costa County rental market is continuing to recover from the oversupply resulting from the high level of production in 1986. This peak production level can be attributed to several factors: moderate interest rates, availability of tax exempt bond financing, rising rents, and a switch in builder/lending industries away from overbuilt office and commercial development. Previously high interest rate levels of almost 17% in 1982 had dropped to 12-13% in 1985 and have continued to decline since then. According to a 1985 Bay Area Council study, bond financing was the single most important factor fostering rental housing production in the Bay Area.

**Table 77**  
**1989 County-wide Median Rent Levels**

|        | <u>Unit Sizes</u> |               |                  |                  |                   |
|--------|-------------------|---------------|------------------|------------------|-------------------|
|        | <u>Rooms</u>      | <u>Studio</u> | <u>1 Bedroom</u> | <u>2 Bedroom</u> | <u>3+ Bedroom</u> |
| Apts.  |                   | \$466 (22)    | \$480 (125)      | \$575 (180)      | \$750 (19)        |
| Condos |                   | - (0)         | 580 (28)         | 750 (85)         | 1000 (36)         |
| Houses |                   | 415 (5)       | 510 (10)         | 700 (45)         | 980 (343)         |
| Total  | \$350 (113)       | 460 (27)      | 510 (163)        | 625 (310)        | 975 (398)         |

Note: Numbers in ()'s = sample size

Source: Community Development Department. Rent listings for unfurnished apartments, condominiums, and houses from 7/23/89 in the Antioch/Pittsburg Daily Ledger, Contra Costa Times, and West County Times. (Duplexes are included in the apartment category.) Shared housing listings for rooms for rent from November 18 or 19, 1989 in West County Times, Contra Costa Times, and Daily Ledger.

As Table 77 indicates, condominiums tend to be slightly more expensive than houses, while houses are generally significantly more expensive than apartments with comparable number of bedrooms. The higher prices for condominiums can be attributed to the amenity packages (such as swimming pools, spas, and tennis courts) included in condominium rentals and the tendency to be newer and, therefore, higher priced units.

A breakdown of 1989 median rent levels by the three sub-areas of the County (West, Central, and East), presented in Table 78, reveals that East County has the lowest rent levels in all unit sizes (with the exception of studio apartments for which there were very few listings). Central County had the most expensive median levels.

A more detailed breakdown of 1989 median rents for communities within the three sub-areas reveals pockets of affordability (see Table 79). The least expensive rentals in the County appear to be located in West County in Crockett/Rodeo, Richmond, and San Pablo and in East County in Antioch, Pittsburg, and Oakley. The most expensive communities for renters are all in the Central County, except for Discovery Bay in East County. The high cost Central County communities include Alamo, Clayton, Danville, Lafayette, Moraga, Orinda, San Ramon, and Walnut Creek.



**Table 78**  
**1989 Median Rent Levels by Sub-Areas of the County**

|                       | <u>Unit Sizes</u> |               |                  |                  |                   |
|-----------------------|-------------------|---------------|------------------|------------------|-------------------|
|                       | <u>Rooms</u>      | <u>Studio</u> | <u>1 Bedroom</u> | <u>2 Bedroom</u> | <u>3+ Bedroom</u> |
| <u>West County</u>    |                   |               |                  |                  |                   |
| Apts.                 |                   | \$325 (7)     | \$475 (36)       | \$598 (62)       | \$750 (7)         |
| Condos                |                   | - (0)         | 675 (2)          | 713 (14)         | - (0)             |
| Houses                |                   | - (0)         | 495 (4)          | 688 (18)         | 950 (49)          |
| Sub Total             | \$337 (20)        | \$325 (7)     | \$475 (42)       | \$625 (94)       | \$925 (56)        |
| <u>Central County</u> |                   |               |                  |                  |                   |
| Apts.                 |                   | \$500 (12)    | \$523 (70)       | \$615 (77)       | \$1300 (7)        |
| Condos                |                   | - (0)         | 575 (25)         | 775 (67)         | 1000 (32)         |
| Houses                |                   | 415 (5)       | 550 (5)          | 795 (15)         | 1200 (207)        |
| Sub Total             | \$350 (82)        | \$500 (17)    | \$543 (100)      | \$665 (159)      | \$1190 (246)      |
| <u>East County</u>    |                   |               |                  |                  |                   |
| Apts.                 |                   | \$395 (3)     | \$435 (19)       | \$495 (41)       | \$725 (5)         |
| Condos                |                   | - (0)         | 550 (1)          | 612 (4)          | 695 (4)           |
| Houses                |                   | - (0)         | 385 (1)          | 687 (12)         | 875 (87)          |
| Sub Total             | \$322 (11)        | \$395 (3)     | \$435 (21)       | \$510 (57)       | \$850 (96)        |

Note: Numbers in ()'s = sample sizes

Source: Community Development Department. Rental listings (unfurnished) for 7/23/89 in Antioch/Pittsburg Daily Ledger, Contra Costa Times, West Contra Costa Times. Room listings from November 18 or 19, 1989 in Daily Ledger, Contra Costa Times, and West Contra Costa Times.

**Table 79**  
**1989 Median Rents by Community**

|                       | <u>Unit Sizes</u> |                  |                  |                   |
|-----------------------|-------------------|------------------|------------------|-------------------|
|                       | <u>Studio</u>     | <u>1 Bedroom</u> | <u>2 Bedroom</u> | <u>3+ Bedroom</u> |
| <u>West County</u>    |                   |                  |                  |                   |
| Crockett/Rodeo        | \$450 (2)         | \$512 (6)        | \$565 (5)        | \$ 850 (5)        |
| El Cerrito            | - (0)             | 550 (1)          | 750 (3)          | 975 (4)           |
| El Sobrante           | - (0)             | 525 (1)          | 610 (16)         | 1125 (4)          |
| Hercules              | - (0)             | - (0)            | 712 (4)          | 1050 (11)         |
| Pinole                | - (0)             | 512 (2)          | 700 (4)          | 1050 (6)          |
| Richmond              | 325 (5)           | 480 (25)         | 625 (37)         | 870 (15)          |
| San Pablo             | - (0)             | 470 (6)          | 550 (25)         | 900 (11)          |
| <u>Central County</u> |                   |                  |                  |                   |
| Alamo                 | - (0)             | - (0)            | - (0)            | 1690 (5)          |
| Clayton               | - (0)             | - (0)            | 850 (1)          | 1275 (2)          |
| Clyde                 | - (0)             | - (0)            | - (0)            | 825 (1)           |
| Concord               | 460 (7)           | 525 (39)         | 620 (71)         | 950 (62)          |
| Danville              | 550 (1)           | - (0)            | 803 (6)          | 1450 (25)         |
| Lafayette             | 475 (1)           | 595 (6)          | 850 (7)          | 1350 (14)         |
| Martinez              | 445 (2)           | 450 (16)         | 708 (16)         | 1095 (21)         |
| Moraga                | - (0)             | - (0)            | 950 (3)          | 1500 (8)          |
| Orinda                | 535 (1)           | 763 (2)          | - (0)            | 1350 (16)         |
| Pleasant Hill         | - (0)             | 568 (8)          | 680 (8)          | 1050 (28)         |
| San Ramon             | - (0)             | - (0)            | 800 (5)          | 1200 (20)         |
| Walnut Creek          | 515 (5)           | 565 (29)         | 750 (42)         | 1250 (41)         |
| <u>West County</u>    |                   |                  |                  |                   |
| Antioch               | - (0)             | 435 (15)         | 500 (36)         | 880 (58)          |
| Brentwood             | - (0)             | - (0)            | 660 (2)          | 700 (1)           |
| Discovery Bay         | - (0)             | - (0)            | 850 (2)          | 1175 (5)          |
| Oakley                | - (0)             | - (0)            | - (0)            | 850 (21)          |
| Pittsburg             | 395 (1)           | 400 (3)          | 550 (16)         | 825 (34)          |

Source: Community Development Department. Rental listings (unfurnished) for 7/23/89 in Antioch/Pittsburg Daily Ledger, Contra Costa Times, West Contra Costa Times.

#### Rental Affordability

Based on 1989 countywide median rent levels, Contra Costa County households would need a very low income level of \$14,000 for shared housing, a low income level of \$18,400 for studio units, a low income level of \$20,400 for one bedroom units, and \$25,000 for two bedroom units and a moderate income level of \$39,000 for three or more bedroom units, as defined by 1989 HUD median income levels adjusted by household size.

Median rent levels were affordable to very low income households only in certain communities. For very low income households, median rents levels for studios were only affordable in Richmond, for one bedrooms in Martinez and East County, and for two bedrooms in Antioch. Median rent levels for three or more bedroom units were not affordable to very low income households in any area of the County. Rooms to share were only affordable to those in the upper range of the every low income category.

Countywide median rent levels for studios, one bedrooms, and two bedrooms fell approximately in the middle of the rents affordable to low income households. East County was the only area of the County that had median rents in one and two bedroom units affordable to all low income households. Median rents were not affordable to low income households in the three or more bedroom unit size in any of the three areas of the County.

Based on HUD 1989 median income levels for Contra Costa County, moderate income households could afford median 1989 rents, with the exception of the larger 3 or more bedroom units in affordable to the lower range of moderate income households in West and Central County.

In conclusion, it appears that the private sector is providing rentals affordable to moderate income households and to smaller low income households in the upper low income range in all unit sizes. For very low income households, the lower income range of low income households, and large low income households (four or more persons), the private sector is not providing affordable rental units in the three sub-areas of the County. The most critical needs for housing to be assisted through public programs to provide affordable rent levels are for shared housing for very low income households, for rentals affordable to very low income and the lower end of the low income range throughout the County, and for 3 or more bedroom rentals affordable to low income households.

It is important to note that HUD median income levels are based on income levels for a family of four and then adjusted for different household sizes. Family incomes, at \$26,510 in the 1980 census, averaged 16% higher than household incomes, of \$22,870. Incomes are also much lower for renter households than for households or families overall. Average renter incomes in the 1980 census of \$13,866 were only 52% of average family incomes of \$26,510 in Contra Costa County. Since homeowner and family incomes tend to be higher than incomes for renter households of the same size, HUD income figures tend to be high. This means that the affordability problem is much more severe than suggested by HUD income levels.



Table 80  
Affordable Rent Levels For Very Low,  
Low, and Moderate Income Family Households  
In 1989

| <u>Maximum<br/>Income Level</u> | <u>Unit Types</u> |                  |                   |                    |
|---------------------------------|-------------------|------------------|-------------------|--------------------|
|                                 | <u>Studio</u>     | <u>1 Bedroom</u> | <u>2 Bedrooms</u> | <u>3+ Bedrooms</u> |
| Very Low                        | \$ 394            | \$ 450           | \$ 506            | \$ 563             |
| Low                             | 594               | 676              | 762               | 848                |
| Moderate                        | 891               | 1,017            | 1,143             | 1,272              |

Based on U.S. Department of Housing and Urban Development median income levels for Oakland PMSA (Alameda and Contra Costa Counties) as of February, 1989. Very low income is defined as 50% of median income levels adjusted by household size (adjusted by HUD to match State Median Income Levels), low income as 80% of median income, and moderate at 120% of median income. Affordable rent levels are based on 30% of monthly household income for the following household sizes:

Studio -- one person household  
One Bedroom -- two person household  
Two Bedroom -- three person household  
Three Bedroom -- four person household

Table 81  
Affordable Rent Levels for Very Low, and  
Moderate Income Renter Households  
in 1989

| <u>Maximum<br/>Income Level</u> | <u>Unit Types</u> |                  |                   |                    |
|---------------------------------|-------------------|------------------|-------------------|--------------------|
|                                 | <u>Studio</u>     | <u>1 Bedroom</u> | <u>2 Bedrooms</u> | <u>3+ Bedrooms</u> |
| Very Low                        | \$ 197            | \$ 225           | \$ 253            | \$ 282             |
| Low                             | 297               | 338              | 381               | 424                |
| Moderate                        | 446               | 509              | 572               | 636                |

NOTE: Based on U.S. Department of Housing and Urban Development median income levels for Oakland PMSA (Alameda and Contra Costa Counties) as of February, 1989. Very low income is defined as 50% of median income levels adjusted by household size (adjusted by HUD to match State Median Income Levels), low income as 80% of median income, and moderate at 120% of median income. Affordable rent levels are based on 30% of monthly household income for the following households sizes:

Studio - one person household  
One Bedroom - two person household  
Two bedroom - three person household  
Three bedroom - four person household

Source: U.S. Department of Housing and Urban Development, February, 1989; HUD family incomes adjusted by Community Development Department by .5 factor for renter vs. family income levels from 1980 U.S. Bureau of Census income data.

When HUD income levels are adjusted for rent levels affordable to the renter population alone, by a factor of 50%, countywide median rents are not affordable to even moderate income renter households. By sub-area of the County, only studios and one bedrooms in West and East County and two bedrooms in East County are affordable to some moderate income renter households. By sub-area and by community, no median rent levels were affordable to very low or low income renter households (see Table 81).

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**APPENDIX B**

**SUMMARY OF FEDERAL AND STATE  
LOW AND MODERATE INCOME PROGRAMS**

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APPENDIX B

FEDERAL AND STATE LOW AND MODERATE INCOME PROGRAMS - A SELECTED SUMMARY

| Name of Program  | Administering Agency<br>and Intermediaries  | Eligible Use of Funds  | Target Population  |
|--|---|--|--|
| <u>RENTERS</u>   |   |  |  |
| Section 202: Direct loan<br>for housing for the<br>elderly and handicapped | Admin: HUD<br><br>Int: Private non-profit<br>developers or<br>cooperatives                                | Loans to construct or<br>acquire and rehabilitate<br>rental or cooperative<br>housing  | Households with elderly<br>(62+) or handicapped  |
| Section 8: Low-income<br>rent assistance (existing<br>housing)             | Admin: HUD<br><br>Int: Public housing<br>agency   | Recurring grant for pay-<br>ment of part of rent to<br>contract units selected<br>by participating house-<br>holds                     | Very-low income house-<br>holds  |
| Housing Vouchers   | Admin: HUD<br><br>Int: Local Housing<br>Authorities   | Recurring monthly assist-<br>ance payment based on<br>difference between tenants<br>contribution toward rent<br>and a payment standard | Very-low income renters  |
| Section 17: Rental<br>Rehabilitation Program                               | Admin: HUD<br><br>Int: State and local<br>governments   | Grants to state and local<br>government to rehabilitate<br>rental units with vouchers<br>or Sect. 8 rental assist-<br>ance             | Very-low income renters  |
| Section 17: Housing<br>Development Grants<br>(HODAG)                       | Admin: HUD<br><br>Int: HUD-designated<br>cities, urban<br>counties, and states<br>or designated sub-parts | Grants to local government<br>to construct or sub-<br>stantially rehabilitate<br>rental or limited equity<br>cooperative housing       | Very-low and low income<br>renters in federally<br>designated high need<br>areas or HUD-approved<br>special housing purposes |
| Public Housing   | Admin: Local Housing<br>Authorities   | Loans to construct and<br>rehabilitate multi-unit<br>rental housing  | Very-low income<br>households  |

| Name of Program  | Administering Agency<br>and Intermediaries   | Eligible<br>Use of Funds   | Target Population                     |
|--|--|--|---------------------------------------|
| <u>RENTERS</u> - Cont.   |  |  |                                       |
| Public Housing Operating<br>Subsidies and Debt Service             | Admin: HUD<br><br>Int: Local Housing<br>Authorities  | Recurring grant to pay<br>operating costs, and<br>principal and interest<br>on bonds   | Very-low income<br>households         |
| Comprehensive Improvement<br>Assistance Program                    | Admin: HUD<br><br>Int: Housing Authorities   | Loans for capital improve-<br>ments and repairs to public<br>housing projects  | Very-low income<br>households         |
| Section 8 Loan Management<br>Set-Aside and Property<br>Disposition | Admin: HUD<br><br>Int: Local Housing<br>Authorities, non-<br>profit and private<br>developers  | Subsidies to financially<br>troubled and converted<br>units based on difference<br>between tenants contri-<br>bution toward rent and<br>unit rental amount | Low income households                 |
| Section 8 Moderate<br>Rehabilitation                               | Admin: HUD<br><br>Int: Public housing<br>agencies, for-profit<br>and non-profit organ-<br>izations, private<br>owners, state housing<br>finance agencies | 15 year subsidies to<br>households living in units<br>which have been rehabil-<br>itated   | Very-low income house-<br>holds       |
| Section 106(b) - Non-<br>Profit Sponsor Assistance<br>Program      | Admin: HUD<br><br>Int: Non-profit corporations   | Loans to sponsors of<br>Section 202 housing for<br>seed money and pre-<br>construction expenses  | Elderly and handicapped<br>households |
| Section 207 - Mortgage<br>Insurance -- Rental<br>Housing           | Admin: HUD<br><br>Int: Investors, builders,<br>developers, and others<br>who meet HUD require-<br>ments for mortgagors                                   | Insures mortgages for the<br>construction or rehabil-<br>itation of dwellings with<br>five or more units   | Low and moderate income<br>households |



| Name of Program  | Administering Agency<br>and Intermediaries   | Eligible<br>Use of Funds   | Target Population  |
|--|--|--|--|
| <u>RENTERS</u> - Cont.   |  |  |  |
| Section 213 - Mortgage Insurance -- Financing Cooperative Housing Projects | Admin: HUD<br><br>Int: Non-profit organizations and other corporations who intend to sell the project to a non-profit organization | Insures mortgages for the construction or rehabilitation of fire or more units of cooperative housing                  | Low and moderate income households                                   |
| Section 220 - Mortgage Insurance -- Rental Housing in Urban Renewal Areas  | Admin: HUD<br><br>Int: Investors, builders, developers, public bodies, and others who met HUD requirements for mortgagors          | Insures lenders against loss on mortgages for acquiring or rehabilitating rental housing in urban renewal areas        | Low and moderate income households                                   |
| Section 231 - Mortgage Insurance -- Rental Housing for the Elderly         | Admin: HUD<br><br>Int: Investors, builders, developers, public bodies and non-profit sponsors                                      | Insures lenders against loss on mortgages for constructing or substantially rehabilitating unsubsidized rental housing | Elderly and handicapped households                                   |
| GNMA Mortgage (tandem plan)  | Admin: GNMA<br><br>Int: Private lenders and developers   | Loans to construct units   | Currently low-income households                                      |
| Section 515: Rural Rental Housing Program                                  | Admin: FmHA<br><br>Int: Public agencies and private limited profit and non-profit developers                                       | Loans to construct or substantially rehabilitate rental and cooperative housing  | Rural, low- and moderate-income families and elderly or handicapped. |

| Name of Program  | Administering Agency<br>and Intermediaries  | Eligible<br>Use of Funds  | Target Population  |
|--|---|---|--|
| <u>RENTERS - Cont.</u>   |   |   |  |
| Section 514: Farm Labor<br>Housing Loans                                   | Admin: FmHA<br><br>Int: Public agencies and<br>private non-profit<br>developers                         | Loans to construct, rehab-<br>ilitate or acquire rental<br>housing                | Farmworkers  |
| Section 516: Farm Labor<br>Housing Grants                                  | Admin: FmHA<br><br>Int: Public agencies and<br>private non-profit<br>developers                         | Non-recurring grants to<br>construct, rehabilitate<br>or acquire rental housing   | Farmworkers  |
| Section 521: Rental<br>Assistance Program                                  | Admin: FmHA<br><br>Int: Public agencies and<br>non-profit organi-<br>zations                            | Recurring grant for pay-<br>ment of part of rent in<br>FmHA-financed rental units | Very-low and low-income<br>rural households and<br>elderly |
| CHFA Multi-Family<br>Rehabilitation and Infill<br>New Construction Program | Admin: CHFA<br><br>Int: Local governments<br>non-profit and private<br>developers                       | Loans to construct, re-<br>habilitate or acquire<br>rental property               | Low income households                                      |
| CHFA Rental Housing<br>Mortgage Loan Program                               | Admin: CHFA<br><br>Int: Limited profit<br>developers, non-profit<br>sponsors, local housing<br>agencies | Loans to construct or re-<br>habilitate rental units                              | Very low and low persons<br>and families                   |
| Rental Housing Finance<br>Program  | Admin: CHFA<br><br>Int:   | Secondary financing to buy<br>down rent levels                                    | Very low and low income<br>households                      |

| Name of Program   | Administering Agency<br>and Intermediaries   | Eligible<br>Use of Funds  | Target Population  |
|---|--|---|--|
| <u>RENTERS</u> - Cont.  |  |   |  |
| Special User Housing<br>Rehabilitation Program                                      | Admin: HCD<br><br>Int: Local government, for<br>profit and non-profit<br>organizations                             | Low interest loans to<br>acquire and/or rehabilitate<br>substandard apartments,<br>group residences, and<br>residential hotels occupied<br>by special populations | Elderly, mentally dis-<br>abled, and physically<br>disabled, low- and very-<br>low income households   |
| Rental Housing Construction<br>Program  | Admin: HCD<br><br>Int: Local Housing<br>Authorities, local<br>government, private,<br>non-profit agencies,<br>CHFA | Direct loans and operating<br>subsidies to construct<br>multi-family rental de-<br>velopments   | Very-low and low-income<br>households  |
| Rural Rental Assistance<br>(Component of Rental<br>Housing Construction<br>Program) | Admin: HCD<br><br>Int:   | Operating subsidies to<br>FmHA Section 515 financed<br>projects   | Very-low and low income<br>rural households  |
| Migrant Services Program<br>Construction  | Admin: HCD<br><br>Int: None  | Non-recurring grants to<br>construct and rehabil-<br>itate migrant farmworker<br>centers  | Seasonal farmworkers   |
| Housing Assistance Program  | Admin: HCD<br><br>Int: Housing Authorities   | Section 8 certificates  | Developmentally,<br>mentally, and physically<br>disabled adults and low<br>income individual<br>households not able to<br>live independently |
| Family Housing Demonstration<br>Program   | Admin: HCD<br><br>Int:   | Construction or acquisi-<br>tion/rehabilitation of<br>housing which includes<br>child care, job training,<br>and employment services                              | Low income households  |



| Name of Program   | Administering Agency<br>and Intermediaries   | Eligible<br>Use of Funds   | Target Population  |
|---|--|--|--|
| <u>RENTERS - Cont.</u>  |  |  |  |
| Low Income Housing Tax Credits  | Admin: MBTCAC<br><br>Int: For-profit and non-profit developers or rental property owners   | Tax credits for acquisition, rehabilitation and construction of rental housing                                     | Very low and low income households (up to 60% of area median income) |
| Calif. Disaster Rehabilitation  | Admin: HCD<br><br>Int: Individuals or local government   | Loans to acquire and rehabilitate rental properties; relocation assistance to displaced persons                    | October, 89<br>Earthquake victims                                    |
| Tax Exempt Multi-family Mortgage Revenue Bonds                              | Admin: Cities and Counties with authority from state<br><br>Int: Private lenders/credit enhancers and private or non-profit developers | Loans to construct or rehabilitate and acquire rental housing  | Low income renters   |
| <u>OWNERS</u>   |  |  |  |
| Section 235: Homeownership Assistance for Low- and Moderate-Income Families | Admin: HUD<br><br>Int: Private lenders   | Recurring grant for payment of part of interest to finance new or substantially rehabilitated owner-occupied units | Low- and moderate income households                                  |
| Section 203(b) - FHA Mortgage Insurance - Homes                             | Admin: HUD/FHA<br><br>Int: All families  | Insures lenders against loss on mortgage loans   | Low- and moderate-income households                                  |

OWNERS - Cont.

|   |  |  |   |
|---|--|--|---|
| Section 220 - Mortgage Insurance -- Homes in Urban Renewal Areas        | Admin: HUD/FHA<br>Int: Investors, builders, developers, public bodies and others who meet HUD requirements for mortgages | Insures lenders against loss on mortgages for acquiring and rehabilitating one to eleven-unit housing in urban renewal areas | Low- and moderate-income households       |
| Section 221(d)(2) Homeownership Assistance to Low and Moderate Families | Admin: HUD/FHA<br>Int:   | Loans to purchase, construct, or rehabilitate 1-4 unit dwellings   | Low and moderate families                 |
| Nehemiah Grant Program  | Admin: HUD<br>Int: Non-profit corporations   | Deferred payment 2nd loans to homeowners to purchase newly constructed or rehabilitated HUD-approved units                   | Median income households                  |
| VA Loan Guaranty Program  | Admin: DVA<br>Int:   | Loan guarantees for loans made to veterans by private lenders  | Qualified veterans                        |
| Section 502: Homeownership and Rehabilitation Loans                     | Admin: FmHA<br>Int: None   | Loans to buy, build, repair, or renovate homes owner occupied  | Rural very low and low-income homeowners  |
| FmHA Section 533 - Rural Housing Preservation Grants                    | Admin: FmHA<br>Int: Governmental entities and non-profit organizations   | Grants or loans to repair and rehabilitate homes to remedy code violations   | Very low- and low-income rural homeowners |
| Section 504: Home Repair Loans or Grants                                | Admin: FmHA<br>Int: None   | Loans or non-recurring grants to repair owner-occupied units with safety or health hazards                                   | Rural, very-low income homeowners         |

| Name of Program  | Administering Agency<br>and Intermediaries  | Eligible<br>Use of Funds  | Target Population  |
|--|---|---|--|
| <u>OWNERS</u> - Cont.  |   |   |  |
| Section 523: Self-Help<br>Housing Site Loans                   | Admin: FmHA<br><br>Int: Public and non-<br>profit groups                                  | Technical assistance grants<br>for self-help projects<br>funded under 502 program                               | Rural, very-low and low<br>income homeowners who<br>are building their own<br>homes                                  |
| Matching Downpayment<br>Program                                | Admin: CHFA<br><br>Int:   | Matching downpayment<br>contributions for CHFA<br>mortgage loans  | Low income households  |
| CHFA Home Mortgage<br>Purchase Program                         | Admin: CHFA<br><br>Int: Private lenders and<br>local governments                          | Loans to purchase or<br>improve owner-occupied<br>single-family units and<br>one-to-four unit buildings         | Low- and moderate-income<br>households in mortgage<br>assistance areas and<br>concentrated rehabili-<br>tation areas |
| Self-Help Housing Program                                      | Admin: CHFA<br><br>Int: Non-profit developers   | Mortgage loans and con-<br>struction loan credit<br>enhancers for self-help<br>housing                          | Low income families  |
| California Veterans Farm<br>and Home Loan Program<br>(CAL-VET) | Admin: DVA<br><br>Int: None   | Loans to purchase and<br>improve owner-occupied<br>single-family homes and<br>mobilehomes                       | California veterans  |
| California Self-Help<br>Housing Program                        | Admin: HCD<br><br>Int: Local governments and<br>non-profit organi-<br>zations             | Mortgage assistance or<br>technical assistance grants<br>for constructing or rehab-<br>ilitating homes          | Low- and moderate-<br>income households  |
| Mobilehome Park<br>Assistance Program                          | Admin: HCD<br><br>Int: Mobilehome residents<br>and local public entity<br>as co-applicant | Loans and technical assist-<br>ance to mobilehome park<br>residents to purchase and<br>operate mobilehome parks | Low-income households  |



| Name of Program                                    | Administering Agency<br>and Intermediaries                                   | Eligible<br>Use of Funds   | Target Population   |
|--|--|--|---|
| <u>OWNERS</u> - Cont.                              |  |  |   |
| California Homeownership Assistance Program (CHAP) | Admin: HCD<br>Int: Local government agencies                                 | Loans to purchase condominiums, mobilehome park spaces, mobilehomes on permanent foundation, and cooperative units | Low- and median income first-time homebuyers and condominium conversion displaces |
| California Disaster Rehabilitation Program         | Admin: HCD<br>Int: Individuals or local government                           | Loans to homeowners of owner-occupied units for rehabilitation and reconstruction                                  | October 1989 Earthquake victims   |
| Mortgage Credit Certificates                       | Admin: MBTCAC<br>Int: Local governments                                      | Tax credits for homeowners' mortgage interest payments   | Low- and moderate-income first-time homebuyers                                    |
| Weatherization Assistance for Low Income Persons   | Admin: DEO<br>Int: Private, non-profit organizations, local governments      | Grants for home insulation and weatherization  | Low income persons, especially elderly and handicapped                            |
| Low Income Home Energy Assistance                  | Admin: CSD<br>Int: States, territories and indian tribes, local CSD agencies | Energy assistance grants including weatherization  | Low income households   |
| Single Family Mortgage Revenue Bonds               | Admin: Cities and counties<br>Int: Private lenders and developers            | Loans to acquire single-family residences  | Low- and moderate-income first-time home buyers                                   |

| Name of Program   | Administering Agency<br>and Intermediaries   | Eligible<br>Use of Funds  | Target Population  |
|---|--|---|--|
| <u>OWNERS OR RENTERS</u>                                    |  |   |  |
| Section 312: Rehabilitation<br>Loans                        | Admin: HUD<br><br>Int: Local governments   | Loans to rehabilitate units<br>in community development<br>block grant, urban home-<br>steading, urban renewal,<br>and code enforcement areas   | Property owners in the<br>indicated areas. Multi-<br>family projects must<br>also be in predominately<br>low income areas with<br>51% low income occupants |
| Community Development<br>Block Grants                       | Admin: HUD<br><br>Int: Formula grants to<br>Entitlement Cities<br>and counties   | Entitlement grants to<br>cities and counties; local<br>governments make grants,<br>loans, loan guarantees, or<br>interest supplements for<br>rehabilitation or to<br>facilitate the construction<br>of new dwelling units | Very-low and low-income<br>households  |
| Section 203(k) - Rehab-<br>ilitation Mortgage<br>Insurance  | Admin: HUD<br><br>Int: Any person able to<br>make a cash investment<br>and the mortgage pay-<br>ment                   | Insures lenders against<br>loss on loans to rehab-<br>ilitate, refinance and<br>purchase and rehabilitate<br>a 1-4 unit dwelling  | Low- and moderate-income<br>households   |
| Section 207 - Mortgage<br>Insurance for Mobilehome<br>Parks | Admin: HUD<br><br>Int: Investors, builders,<br>developers, and others<br>who meet HUD require-<br>ments for mortgagors | Insures lenders against<br>loss on loans to construct<br>or rehabilitate mobile-<br>home parks consisting of<br>five or more spaces   | Low- and moderate-income<br>households   |

| Name of Program  | Administering Agency<br>and Intermediaries   | Eligible<br>Use of Funds   | Target Population   |
|--|--|--|---|
| <u>OWNERS OR RENTERS - Cont.</u>                                   |  |  |   |
| Solar Energy and Energy<br>Conservation Bank                       | Admin: HUD<br><br>Int: None  | Grants or loans for purchase<br>or installation of conser-<br>vation and solar measures  | Owners or tenants   |
| Section 524 - Rural Housing<br>Site Loans                          | Admin: FmHA<br><br>Int: Self-help sponsors,<br>public agencies,<br>private non-profit<br>organizations | Short term site acquisition<br>loans   | Rural FmHA assisted<br>renters or cooperative<br>owners                                     |
| Section 525(a) - Technical<br>and Supervisory Assistance<br>Grants | Admin: FmHA<br><br>Int: Public bodies, public<br>or non-profit<br>corporations                         | Grants for programs to<br>assist residents to<br>obtain or maintain<br>adequate housing  | Rural low income<br>residents   |
| Urban Pre-Development<br>Loan Program                              | Admin: HCD<br><br>Int: Local government<br>organizations, coop-<br>erative housing<br>corporations     | Loans to pay for prede-<br>velopment costs such as<br>land purchase, engineering<br>fees, architectural costs,<br>and legal fees | Very-low and low-income<br>families and elderly or<br>handicapped persons in<br>urban areas |
| Deferred Payment Rehabil-<br>itation Loan Fund                     | Admin: HCD<br><br>Int: Local government<br>agencies, non-profit<br>organizations                       | Loans to rehabilitate<br>housing units   | Low- and moderate-income<br>households in local<br>rehabilitation areas                     |



| Name of Program                              | Administering Agency<br>and Intermediaries   | Eligible<br>Use of Funds   | Target Population   |
|--|--|--|---|
| <u>OWNERS OR RENTERS - Cont.</u>             |  |  |   |
| Rural Land Purchase                          | Admin: HCD<br><br>Int: Local government<br>agencies, non-profit<br>organizations   | Loans to purchase land in<br>rural areas   | Very-low and low-income<br>rural residents  |
| Rural Pre-Development<br>Loan Fund           | Admin: HCD<br><br>Int: Local government<br>agencies, non-profit<br>organizations, coop-<br>erative housing<br>corporations                     | Loans to pay for pre-de-<br>velopment costs such as<br>land purchase, engineer-<br>ing fees, architectural<br>costs, and legal fees                                    | Very-low and low-income<br>families and elderly or<br>handicapped persons in<br>rural areas |
| Farmworker Housing<br>Grant Fund             | Admin: HCD<br><br>Int: Local government<br>agencies, non-profit<br>organizations, and<br>cooperative housing<br>corporations and<br>homeowners | Non-recurring grants to<br>construct and rehabilitate<br>rental and owner-occupied<br>units  | Low-income farmworkers  |
| California Housing<br>Rehabilitation Program | Admin: HCD<br><br>Int: Public or private<br>entities, individuals,<br>for-profit and non-<br>profit corporations                               | Acquisition conversion and<br>rehabilitation of owner-<br>occupied and rental housing<br>(including SRO's, group<br>homes and cooperatives).<br>Permanent housing only | Very low- and low-income<br>households, seniors,<br>disabled, rural resi-<br>dents          |
| Senior Citizens Shared<br>Housing Program    | Admin: HCD<br><br>Int: Local government and<br>non-profit corporations   | Grants to operate shared<br>housing programs   | Seniors   |

| Name of Program | Administrative Agency<br>and Intermediaries | - Eligible<br>Use of Funds | Target Population |
|-----------------|---|----------------------------|-------------------|
|-----------------|---|----------------------------|-------------------|

OWNERS OR RENTERS - Cont.

|   |   |  |  |
|---|---|--|--|
| SB 99: Redevelopment<br>Construction Loan Act | Admin: Redevelopment agencies                                     | Loans for construction and<br>limited rehabilitation of<br>owner-occupied and rental<br>units    | Moderate- and high-<br>income households<br>(usually in rehabili-<br>tation areas) |
|   | Int: Private lenders and<br>developers                            |  |  |
| Marks-Foran Residential<br>Rehabilitation Act | Admin: Local government<br>agencies                               | Loans to construct, re-<br>habilitate, and acquire<br>single-family and multi-<br>unit dwellings | Low- and moderate-income<br>households (usually in<br>rehabilitation areas)        |
|   | Int: Non-profit corpor-<br>ations, direct loans<br>to individuals |  |  |

HOMELESS PERSONS

|  |   |   |  |
|--|---|---|--|
| Emergency Shelter Grant<br>Program (ESG)                       | Admin: HUD  | Rehabilitation, conversion<br>operating expenses (other<br>than staff) and 20% social<br>services for emergency<br>shelter facilities, homeless<br>prevention services.<br>Aquisition or new construction<br>ineligible | Homeless persons   |
|  | Int: Formula grants to certain<br>local governments, states,<br>CCC allocations made by<br>Community Development<br>Department. |   |  |
| Section 8 SRO Moderate<br>Rehabilitation                       | Admin: HUD. Nationwide<br>competition   | Rental assistance for<br>rehabilitated single<br>room occupancy hotels  | Homeless persons   |
|  | Int: Available to public<br>housing agencies.   |   |  |
| Supportive Housing<br>Demonstration<br>1) Transitional Housing | Admin: HUD. Nationwide<br>competition   | Acquisition, moderate re-<br>habilitation and operating<br>expenses and social services<br>for transitional housing<br>with services. Employment<br>assistance programs. New<br>construction ineligible                 | Homeless persons<br>(targetted to<br>deinstitutionalized<br>persons, mentally<br>disabled homeless,<br>families with<br>children and handi-<br>capped) |
|  | Int: Local governments,<br>states, non-profit<br>corporations, Housing<br>Authorities   |   |  |

| Name of Program   | Administering Agency<br>and Intermediaries   | Eligible<br>Use of Funds  | Target Population  |
|---|--|---|--|
| <u>HOMELESS (Cont'd)</u>  |  |   |  |
| Supportive Housing<br>Demonstration   |  |   |  |
| 2) Permanent Housing for<br>Handicapped Homeless<br>(PHHH)                  | Admin: HUD. Nationwide<br>competition<br><br>Int: Available to states on<br>behalf of non-profit<br>corporations, Housing<br>Authorities or themselves                     | Acquisition, rehabilitation,<br>operating expenses and<br>services for group homes,<br>apts, condos, or cooperatives<br><br>New construction ineligible   | (same as above)  |
| Supplemental Assistance<br>for Facilities to Assist<br>the Homeless (SAFAH) | Admin: HUD. Nationwide<br>competition.<br><br>Int: States, cities, urban<br>countries, tribes,<br>non-profit organizations   | Acquisition, leasing,<br>rehabilitation homeless<br>facilities and supplement<br>to ESG or supportive<br>Housing Demonstration  | Homeless persons,<br>especially families,<br>elderly, and<br>handicapped   |
| Emergency Shelter Program<br>(ESP)  | Admin: HCD<br><br>Int: Formula grants to<br>local government<br>agencies. Alloca-<br>tions to non-profit<br>corporations through<br>local FEMA board                       | Grants for acquiring re-<br>habilitating homeless<br>shelter facilities,<br>purchasing equipment, and<br>vouchers to prevent<br>eviction. Operating costs<br>and new construction<br>ineligible                                   | Homeless individuals and<br>families   |
| Community Development<br>Block Grants                                       | Admin: HUD<br><br>Int: Formula grants to<br>Entitlement Cities and<br>countries. CCC alloca-<br>tions made by Housing<br>and Community Develop-<br>ment Advisory Committee | Non-recurring grants to<br>cities and countries;<br>local governments make<br>grants, loans, loan<br>guarantees, or interest<br>supplements for rehabili-<br>tation or to facilitate<br>the construction of new<br>dwelling units | Very-low and low-income<br>households, seniors,<br>battered women and<br>children, handicapped,<br>illiterate, farmworkers<br>and homeless |



| Name of Program                            | Administering Agency<br>and Intermediaries  | Eligible<br>Use of Funds  | Target Population                                     |
|--|---|---|---|
| <u>HOMELESS (Cont'd)</u>                   |   |   |   |
| Community Services Block<br>Grant Program  | Admin: DEO<br><br>Int: Formula grants to<br>counties or designated<br>Community Action Agency.<br>CCC Allocations Made by<br>Community Services<br>Department | Assistance to individuals<br>to obtain or maintain<br>affordable housing or.  | Very-low, low-income,<br>and homeless<br>individuals  |
| FEMA Emergency Food<br>and Shelter Program | Admin: FEMA<br><br>Int: Available to local<br>governments and non-<br>profit corporations<br>through FEMA boards  | Supplemental funding to<br>existing programs for<br>emergency food, shelter,<br>supportive services, and<br>some rehabilitation.<br>Expanding existing efforts<br>to provide emergency food,<br>shelter, and mortgage, rent<br>and utility assistance | Homeless persons                                      |
| Family Violence<br>Prevention and Services | Admin: HHS<br><br>Int: Formula grants to states<br>for public agencies and<br>non-profit corporations   | Grants to establish,<br>maintain, and expand<br>projects to prevent<br>family violence and<br>provide shelter   | Victims of family<br>violence and their<br>dependents |
| Surplus Property<br>Conversion             | Admin: Non-profits, States,<br>local governments<br><br>Int: DVA  | 20% discounted sales<br>prices for use as<br>emergency shelter<br>for homeless veterans   | Homeless veterans                                     |
| Single Family Property<br>Disposition      | Admin: Government<br><br>Int: HUD   | 10% discounted sale or<br>lease/option of HUD<br>owned single family<br>properties for use<br>by the homeless   | Homeless prsons                                       |

NOTE: For the purposes of this table, very low income is defined as 50% of County median income figure adjusted by household size, low income as 80% of median income, and moderate as 120% of median income.

|        |   |  |
|--------|---|--|
| HUD    | = | U.S. Department of Housing and Urban Development             |
| FmHA   | = | U.S. Farmers Home Administration                             |
| DVA    | = | California Department of Veterans Affairs                    |
| CHFA   | = | California Housing Finance Agency                            |
| HCD    | = | California Department of Housing and Community Development   |
| FNMA   | = | Federal National Mortgage Association                        |
| GNMA   | = | Government National Mortgage Association                     |
| MBTCAC | = | California Mortgage Bond and Tax Credit Allocation Committee |
| DEO    | = | California Department of Economic Opportunity                |
| VA     | = | U.S. Veterans Administration                                 |
| DEO    | = | California Office of Economic Opportunity                    |
| FEMA   | = | Federal Emergency Management Agency                          |
| HHS    | = | U.S. Department of Health and Human Services                 |

Source: Housing Assistance in California: A Program Analysis, William S. Furry (A report prepared for the California State Assembly by The Rand Corporation) March, 1983; HCD, California Statewide Housing Plan; HCD, Directory of Housing Programs: Local, State Federal, March 1987; HUD, Homeless Assistance, July 1, 1989; and Contra Costa County Community Development Department





## LEGEND

- EXISTING FREEWAY
- PROPOSED FREEWAY
- ..... EXPRESSWAY ON EXISTING
- PROPOSED EXPRESSWAY
- EXISTING ARTERIAL
- PROPOSED ARTERIAL
- EXISTING COLLECTOR
- PROPOSED COLLECTOR

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LATITUDE  
37°45'

450M

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COUNTY ADMINISTRATOR

ATTEST *[Signature]*  
DIRECTOR OF PLANNING

ATTEST *Ed Wanaka*  
COUNTY ASSESSOR

ATTEST *Victor W. Sauer*  
PUBLIC WORKS DIRECTOR

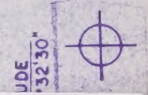
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